



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

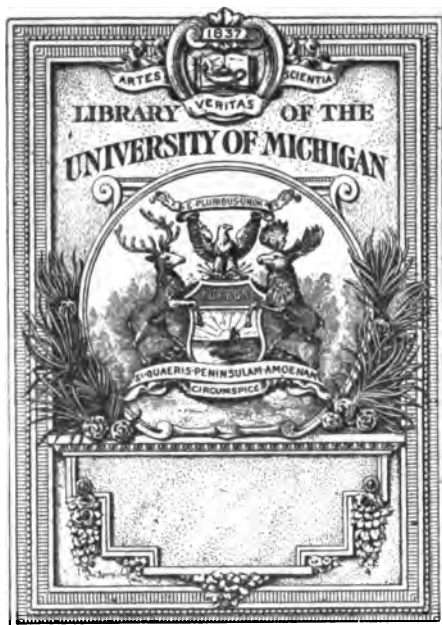
Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

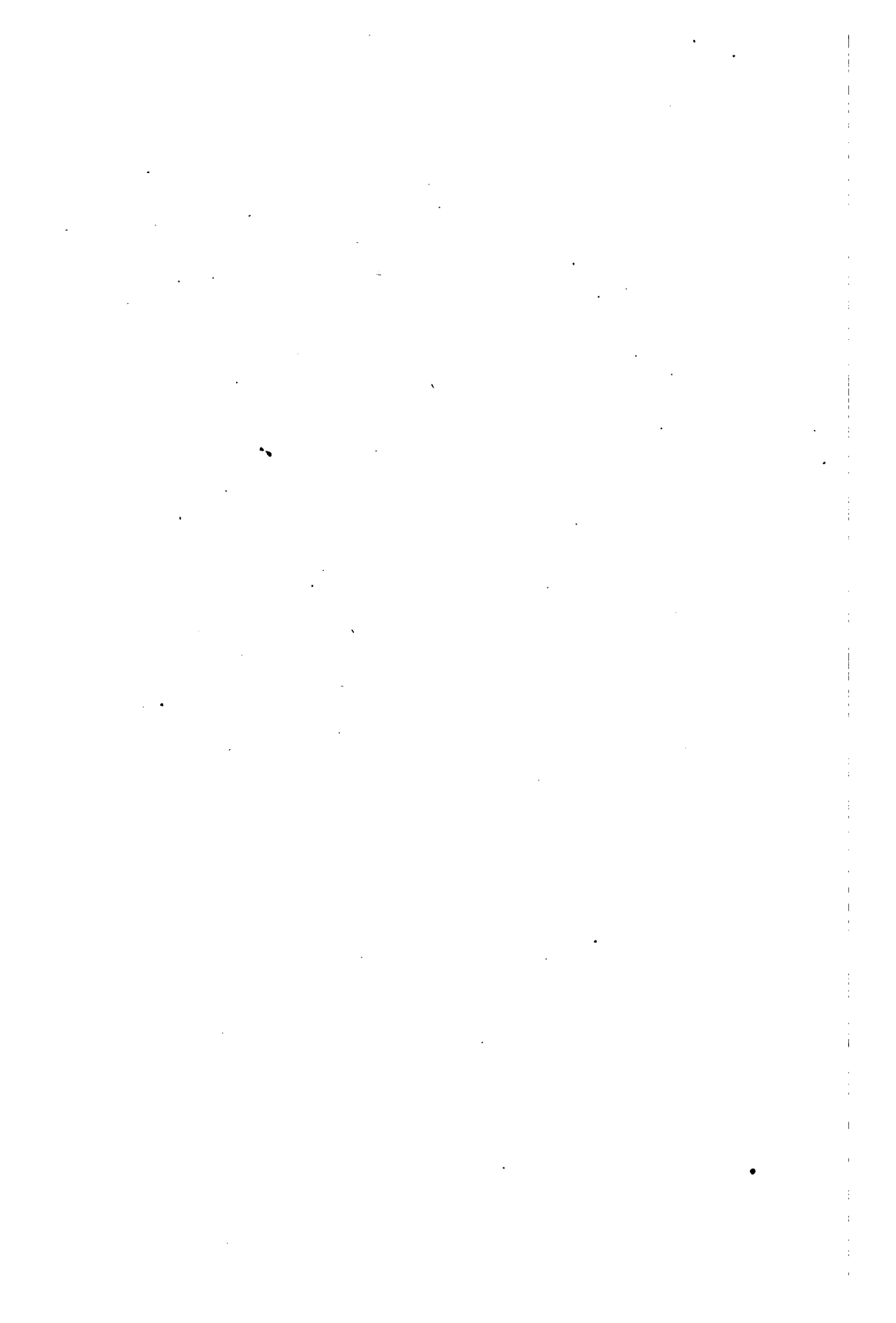


610.5

B92

M5

Y.43



THE
BUFFALO
Medical and Surgical Journal.

EDITORS:

THOS. LOTHROP, M. D.,

A. R. DAVIDSON, M. D.

CV. 432

CV. 52 VOL. XXVII.

AUGUST, 1887, TO JULY, 1888.

BUFFALO:
MEDICAL JOURNAL ASSOCIATION.

1887.

a.

ε.

INDEX.

A		PAGE.	PAGE.
Angell, Edward B., M. D. Some Suggestions Regarding the Management of Hysterical Disorders.....	I	Acute Endocarditis, The Etiology of.....	370
Apostoli's Method of Electrolysis in the Treatment of Fibroid Tumors.....	75	Antithermic Acetanilide as a Nerve Sedative.....	371
Acute Ichiopathic Pleuritis and Acute Articular Rheumatism, Analogy between	77	Aseptic and Antiseptic Surgery, Rules of By Arpad G. Gerster, M. D.....	382
Albuminuria in Health.....	78	Abscess, Peri-Nephritic. By W. H. Heath, M. D.....	385
Ascites in Children.....	81	Antipyrin in Migraine	413
Accidental Vaccinia, A Case of, resulting in Death.....	86	Antipyrin in Acute Bronchitis of Children.....	415
Arsenate of Lithia in Diabetes..	88	Antipyrin. Poisoning by a Ten-grain Dose of	417
Aural Furuncles, Bacteriology of. By Dr. B. Lowenberg.....	102	Acetanilide, New Researches with.....	418
Andrews, Judson B., M. D., Care of the Insane of the United States	104	Antipyrin as a Uterine Sedative.	419
American Gynecological Society.	140	Alkaloid, a Toxic, constantly exhaled from the Lungs.	425
Anæmia. By Frederick P. Henry, M. D.....	144	Atlas of Venereal and Skin Diseases. By Prince A. Morrow, A. M., M. D.....	428 and 430
Acne, The Treatment of	228	Atfidella Reale Accademia Medica di Roma 1886-1887	429
Anatomy, Descriptive and Surgical. By Henry Gray, F. R. S.	237	Address to the Graduating Class of the Medical Department of Niagara University. By Henry Flood, M. D.....	433
Antipyrin and Antifebrin Uses of.....	276	Agnew, Death of Dr. C. R.....	464
Antidotes in Strychnine, Resorcin and PicROTOXINE.....	278	Antipyrin in the Treatment of Seminal Emissions.....	470
Aitken, Wm., M. D. Handbook of Treatment.....	287	Association, the American, of Obstetricians and Gynecologists..	471
Acid, Boracic, in the Treatment of Leucorrhœa.....	323	Asthma, Epileptic. By F. A. Harrington, A. M., M. D.....	496
Anterior Nares, A Ready Method for Removing Foreign Bodies from the.....	329	Aphorisms, Medical.....	558
Acetanilide as a Nerveine.....	331	Antipyrin and Sweet Spirits of Nitre.....	560
Apomorphine.....	334	Advertisements, Quack, in the Religious Press.	572

	PAGE.		PAGE.
B		C	
Bacterial Research, The Fallacies of Popular. By George W. Lewis, A. M., M. D.	8	Buffalo Medical College	420
Burns, Treatment of. Lessons from the Richmond Fire. By George E. Fell, M. D., F. R. M. S.	55	Buffalo Obstetrical Society, Transactions of the.....	459
Browne, Mr. Lennox. Treatment of Tuberculosis of the Larynx	115	Buffalo Obstetrical Society.....	476
Buffalo Law School.....	141	Bailey, Wm. C., M. D. An Inquiry into the Importance of Physical Culture as a Branch of the Science of Prevention..	481
Butler, John S., M. D. The Curability of Insanity and the Individualized Treatment of the Insane	143	Benzoate of Sodium in Throat Affections	506
Bruen, Edward Tunis. Practical Lessons in Nursing.....	144	Brubaker, Arthur, A. M., M. D. A Compend of Human Physiology	528
Buck, Albert H., M. D. A Reference Handbook of the Medical Sciences.....	191	Bard, Dr. L. On Leucocythæmia, considered as Specific Cancer of the Blood.....	561
Bubo, Concerning the Treatment of, by Extirpation of the Glands. By W. H. Heath, M. D.	205		
Buffalo Medical Library Association.....	213	C	
British Gynecological Society... ..	217	Chemical Bodies, Immunity by Injection of.....	34
Buffalo Colleges.....	230	Cynophobia.....	42
Backus, Ogden, M. D., The Recognition of Incipient General Paresis	241	Cancer in Japan.....	83
Barker, The Late Arthur M., M. D.	285	Corrosive Sublimate, Poisoning after Injections of.....	86
Bartholow, Roberts, M. A., M. D., LL. D. A Practical Treatise on Materia Medica and Therapeutics.....	288	Cocaine Inebriety ..	87
Bladder, For Washing out the... ..	310	Contractions of the Uterus throughout Pregnancy. By J. Braxton Hicks, M. D., F. R. S. ..	97
Burns and Frostbites, A New Treatment for.....	372	Cervix Uteri. Rapid Dilatation of the. By Dr. W. W. Wathen..	112
Buffalo State Asylum for the Insane	373	Congress, What Prominent Men say of the.....	124
Bladder, a Case of Bursting of the Bladder, with Remarks. By Dr. Marcell Hartwig.....	393	Constipation, Infantile....	177
Bedbugs, Fleas and Lice, The Use of.....	401	Correction.....	189
Benzoate of Sodium and Uremia	418	Cutler, C. W., M. S., M. D. Differential Diagnosis of Diseases of the Skin.....	192
		Clinical Diagnoses, Manual of. By Dr. Otto Seifert and Dr. F. Mueller.....	192
		Clark, Edward, M. D. A Study of some of the Rectal Disorders of Pregnant Women.....	193
		Cocaine, A Curious Effect of. By Frank Hamilton Potter, M. D..	210
		Colles Fracture, A Contribution to the Study of. By D. M. Totman, M. D.....	212
		Chorea, One Cause of.....	229

	PAGE.		PAGE.
Confinement, The Hour of.....	230	Deniau, Dr. L. <i>Strophanthus</i>	
• Cancer, Vaginal Hysterectomy		<i>Hispidus</i>	165
for.....	232	Diabetes, A Convenient Formula	
Chapman, Henry C., M. D. Treatise on Human Physiology, for the use of Students and Practitioners of Medicine.....	239	for the Treatment of, by	
Corns, Treatment of	271	Lithium in Pill Form.....	172
Carcinoma of the Uterus.....	274	Department of Health of Buffalo,	
Constipation, Another Cure for..	311	Annual Report of the.....	185
Contempt of Court.....	319	Diphtheria, A Treatise on. By	
Cancer and Cancerous Diseases.	321	Dr. A. Samie	190
Compound Salicylated Plaster,		Diseases, Nervous, and their	
On the Advantages of a.....	330	Diagnosis. By H. C. Wood,	
Canadol, A new local Anæsthetic	332	M. D., LL.D	190
Cold on the Heart. By F. R.		Diseases of the Skin, Differential	
Campbell, M. D.....	359	Diagnosis of the. By C.	
Cascara Sagrada, Tasteless Preparations of.....	366	W. Cutler, M. S., M. D.	192
Concentration of the Blood as a Cause of Convulsions.....	368	Duodenum, A New Theory in	
Cancer of the Cervix.....	420	Regard to the Function of the.	230
Catarrhe Cronique Hypertrophique et Atrophique des Fosses Nasales, etc. By Garrigou-Desarenes	430	Disease, that Terrible, The Divers	263
Clark, Alonzo, M. D., LL. D. Lectures on Diseases of the Heart.....	432	Doctors in Russia.....	265
Cronyn, John, M. D. Address on Medicine.	441	Dosimetric Therapeutics as Applied to Pneumonia and Bronchitis.....	266
Constipation, Habitual.....	469	Diarrhœa, Infantile.....	318
Campbell, F. R., A. M., M. D. The Language of Medicine ...	526	Diphtheria	363
Consumption Contagious?.....	559	Doctor and Patient. By S Weir	
Cascara Sagrada in Rheumatism. By H. T. Goodwin, M. D.....	566	Mitchell, M. D., LL.D.....	383
D		Drugs of New York.....	417
Diarrhœa, Treatment of, by Iodoform and Charcoal.....	17	Diseases of the Skin, A Practical Treatise on. By John V. Shoemaker, M.D.	431
Drug Eruptions. By Prince A. Morrow, A. M., M. D.	48	Diseases of the Heart, Lectures on. By Alonzo Clark, M. D., LL.D.	432
Diseases of the Hair and Scalp, A Practical Treatise on the. By Georg Thomas Jackson, M. D.	96	Diagnosis, The, of Contracted or Granular Kidney. By A. D. Lake, M. D.....	447
Drugs, Certain, on the Circulation of the Kidneys. By Dr. Charles D. F. Phillips.....	106	Diseases of the Genito-Urinary Organs, The Surgical. By E. L. Keyes, M. D.....	419
		Diseases, The Infectious. By Prof. Karl Liebermeister.....	575
		E	
		Eliot, Gustavus, A. M., M. D. The Treatment of Neuralgia in General Practice	157
		Expert, An.	265
		Epistaxis, Treatment of.....	272

PAGE.	PAGE.	
Ergotine, On the Subcutaneous Use of, in Diabetes and Albuminuria..... 280	Fell, George E., M. D., F. R. M. S. Forced Respiration in Opium Poisoning, its Possibilities, and the Apparatus best adapted to produce it..... 145	
Experiments bearing on the Infliction of the Death Penalty by Electricity..... 303	Fever, Typhoid..... 270	
Examination for License to Practice..... 311	Fever, The Influence of upon Insanity..... 275	
Enemata, Nutrient..... 312	Fractures, Treatment of, by Massage. By F. A. Harrington, M. D..... 308	
Elsner, H. L. Early Diagnosis of Tubercular Meningitis in Children... 337	Free Trade for Physicians..... 333	
Excessive Corpulence, The Guiding Principles of Treatment in. 409	Fell, Geo. E., M. D., F. R. M. S. Forced Respiration, Case No. 3. 345	
Erythrophloëin, Notes on Another Supposed Local Anæsthetic. By Alvin A. Hubbell, M. D. 458	Frederick, C. C., M. D. Hysterio-Epilepsy complicating Pregnancy..... 353	
Electricity, A Practical Treatise on the Medical and Surgical Uses of. By George M. Beard, A. M., M. D., and A. D. Rockwell, A. M., M. D..... 478	Fox, Dr. George H. Photographic Illustrations of Skin Diseases..... 383	
Essentials of Physiology, Questions and Answers on the. By H. A. Hare, M. D..... 480	Fever Nursing, Practical Lessons in. By J. C. Wilson, A. M., M. D..... 384	
Essentials of Chemistry and Toxicology. By A. R. Witthaus, A. M., M. D..... 480	Fevers, Periods of Isolation for Eruptive..... 400	
Electro-Magnet in Removal of Steel from the Interior of the Eye. By Alvin A. Hubbell, M. D..... 545	Fever, Chagres, at Panama.... 403	
Essentials of Medical Chemistry and Urinalysis. By S. E. Woody. A. M., M. D..... 576	Flood, Henry, M. D. Address to the Graduating Class of the Medical Department of Niagara University..... 433	
F		
Fibroids of the Uterus, On the Treatment of, by Electricity. By W. Windham Webb, M. D., M. R. C. P., London..... 66	G	
Follicular Tonsillitis and Idiopathic Peritonitis..... 182	Gonorrhœa Injection for..... 20	
Fell, Geo. E., M. D., F. R. M. S. Treatment of Burns. Lessons from the Richmond Fire..... 55	Gastric Ulcer, Pathogeny of 36	
	Gaseous Enemata..... 37	
	Greene, Walter D., M. D. Pelvic Cellulitis 49	
	Guaiac in Quinsy..... 64	
	Gaseous..... 66	
	Gonorrhœa and Spermatorrhœa, On the Pathology and Treatment of. By J. L. Milton.. 96	
	Gray's, A New Edition of..... 171	
	Gynecology, A System of, by American Authors. By Mathew D. Mann, M. D..... 189	

	PAGE.		PAGE.
Granger, Wm. D., M. D. Increase of the Insane, and some Problems connected with their Public Care	220	Hæmorrhoids, Treatment of Internal, by Injections.....	270
Gray, Henry, F. R. S. Anatomy, Descriptive and Surgical.....	237	Hamilton, Allen McLane, M. D. Hamilton's Medical Jurisprudence.....	286
Gynecology, Lessons in. By Wm. Goodell, A. M., M. D....	240	Hand-book of Treatment. By Wm. Aitken, M. D.....	287
Goodell, Wm., A. M., M. D., Lessons in Gynecology.	240	Hayd, Herman E., M. D., M. R. C. S. Treatment of Chronic Stomach Troubles by Irrigation	289
Gonorrhœa and Sterility.....	265	Harrington, F. A., M. D. Treatment of Fractures by Massage.	308
Gastrotomy, A Second, for the Removal of a Foreign Body from the Œsophagus.....	273	Hymen, The Nature of the.....	316
Gastric Ulcer, The Etiology of..	331	Hypnotic, A New.....	332
Garmahy, J. J., A. M., M. D. Operative Surgery on the Cadaver.....	336	Health Physician, The.....	332
Gerster, Arpad G., M. D. Rules of Aseptic and Antiseptic Surgery	382	Hystero-Epilepsy complicating Pregnancy. By C. C. Frederick, M. D.....	353
Graduates in Medicine in the United States	416	Heart and Lungs, Contributions to the Study of the. By James R. Leaming, M. D.....	384
Garrigou—Desarene. Du Catarrhe Chronique Hypertrophique et Atrophique des Fosses Nasales. etc.....	430	Heath, W. H., M. D. Perinephritic Abscess.....	385
Goodwin, H. F., M. D. Cascara Sagrada in Rheumatism.....	566	Hartwig, Dr. Marcell. A Case of Bursting of the Bladder, with Remarks....	393
H		Hydrastis Canadensis, Contribution to the Study of.....	413
Hysterical Disorders, Some Suggestions regarding the Management of. By Edward B. Angell, M. D.....	1	Hemorrhage, Uterine.....	444
Hypnotic Medication.....	85	Hygiene, The, of the Skin, or the Art of Preventing Skin Diseases. By A. Ravogli, M. D..	431
Hicks, J. Braxton, M. D., F. R. S. Contractions of the Uterus throughout Pregnancy.....	97	Hubbell, Alvin A., M. D. Note on Erythrophloein, another supposed local Anæsthetic. ...	458
Henry, Frederick P., M. D. Anæmia.....	144	Hare, H. A., M. D. Questions and Answers on the Essentials of Physiology.....	480
Heath, W. H., M. D. Concerning the Treatment of Bubo by Extirpation of the Glands.....	205	Harrington, F. A., A. M., M. D. Epileptic Asthma.....	496
Howe, Dr. Lucien.....	235	Hysteria and Brain Tumor. By Mary Putnam Jacobi, M. D....	527
Harrington, Frank A., M. D. On the Subcutaneous Injection of blood, Infusion (subcutaneous) and Intravenous Transfusion..	258	Hubbell, Alvin A., M. D. The Electro-Magnet in the Removal of Steel from the Interior of the Eye.....	545
		Hewitt, Grailey, M. D. The Pathology, Diagnosis, and Treatment of the Diseases of Women.	575

	PAGE.		PAGE.
I		J	
Iodoform, Modes of Disguising the Odor of	26	Jackson, George Thomas, M. D. A Practical Treatise on the Diseases of the Hair and Scalp, 96	
Iodol: An Effective Substitute for Iodoform.....	84	Jenks Memorial Prize, The Wm. F.....	379
Insane, Care of the, in the United States. By Judson B. Andrews, M. D.	104		
Inducement, An.....	173		
Insane, Increase of the, and some Problems connected with their Public Care. By Wm. D. Granger, M. D.....	220		
Incipient General Paresis, The Recognition of. By Ogden Backus, M.D.....	241		
Injection, On the Subcutaneous, of Blood. Infusion (subcutaneous) and Intravenous Transfusion. By Frank A. Harrington, M. D.....	258		
Interstitial Affections, Antiseptic Treatment of.....	263		
Inquiry, An, into the Importance of Physical Culture as a Branch of the Science of Prevention. By Wm. C. Bailey, M. D.....	481		
Intubation of the Larynx, A German View of	505		
Intra-Uterine Tamponing.....	508		
Inflammations, Remarks on Pelvic, and the Management of their Residues. By Wm. W. Potter, M. D.....	530		
Infant Feeding, Art of. By W. I. Thayer, D. D. S., M. D., Brooklyn, N. Y.....	554		
Inoculation, The Method of, in Brazil and Mexico.....	559		
J		K	
Jackson, George Thomas, M. D. A Practical Treatise on the Diseases of the Hair and Scalp, 96		Keys, E. L., A. M., M. D. The Surgical Diseases of the Genito-Urinary Organs.....	479
Jenks Memorial Prize, The Wm. F.....	379		
		L	
		Lewis, George W., Jr., A. M., M. D., The Fallacies of Popular Bacterial Research.....	8
		Leonard, C. Henry, The Vest-Pocket Anatomist.....	48
		Lutand, Dr. M. Pasteur et la Rage.....	95
		Labor, Mechanism of. By Prof. T. Lazarewitch, M. D.....	101
		Lazarewitch, Prof. T., M. D. Mechanism of Labor.....	101
		Lowenberg, Dr. B. Bacteriology of Aural Furuncles.....	102
		Larynx Intubation of the. By Dr. Joseph O'Dwyer.....	108
		Lupus Erythematosus. By Dr. Ravogli.....	119
		Leprosy Scare, The.....	283
		Laparotomy in Suppurative and Tubercular Peritonitis	324
		Lavage in Children.....	373
		Leaming, James R., M. D. Contributions to the Study of the Heart and Lungs	384
		Lake, A. D., M. D., Perrysburg, N. Y. The Diagnosis of Contracted or Granular Kidney....	447
		Lung, Inundation of the.....	464
		Leucocythæmia, Considered as Specific Cancer of the Blood. By L. Bard, M. D.....	561
		Liebermeister, Prof. Karl. The Infectious Diseases.....	575
		M	
		Medical Logic	19

PAGE.	PAGE.
Medical Examiners, The New York State Board of..... 29	Medical Jurisprudence, Hamilton's. By Allen McLane Hamilton, M. D..... 286
Microbe of Cancer. The 33	Materia Medica and Therapeutics, A Practical Treatise on. By Robert Bartholow, M. A., M. D., LL. D..... 288
Morrow, Prince A., A. M., M. D., Drug Eruptions..... 48	Microscopy, Practical, A Course of Normal Histology for Students and Practitioners of Medicine. By Maurice N. Miller, M. D 335
Morse, Willard, H., M. D. A Word as to Papoid..... 63	Miller, Maurice N., M. D., Practical Microscopy, A Course of Normal Histology for Students and Practitioners of Medicine. 335
Mamma in an Ovarian Tumor... 65	Materia Medica An Index of. By Chas. A. May, M D 336
Medical School, Selection of..... 88	May, Chas. A.. M. D. An Index of Materia Medica..... 336
Medical Law. Codified, of New York State..... 21	Medical Education, Promoting the Cause of Higher..... 381
Medical Congress. International.. 91	Mitchell, S. Weir, M. D., LL. D. Doctor and Patient..... 383
Milton, J. L. On the Pathology and Treatment of Gonorrhoea and Spermatorrhoea 96	Medicines, Physiological Action of. By Louis Starr, M. D., James B. Walker, M. D, and W. M. Powell, M. D..... 384
Menstruation, Vicarious. By Duncan C. McCallum, M. D., M. R. C. S..... 99	Morrow, Prince A., A. M., M. D. Atlas of Venereal and Skin Diseases..... 428 and 480
McCallum, Duncan C., M. D., M. R. C. S. Vicarious Menstruation..... 99	Medicine, Address on. By John Cronyn, M. D 441
Medical Congress, Notes and Gossip about the International ... 128	Memoriam, In..... 516
Medical Education in America... 137	Medical Nomenclature, A Revised 522
Medical Congress, The Ninth International. 174	Medical Association, The Cincinnati Meeting of the American.. 524
Mann, Matthew D., M. D. A System of Gynecology by American Authors 189	Medicine, The Language of. By F. R. Campbell, A. M., M. D.. 526
Medical Sciences, A Reference Handbook of the. By Albert H. Buck, M. D 191	Medicines in Germany, The Suppression of Quack..... 560
Medicines The Therapeutic Value of Some, in the Treatment of Hemorrhagic Conditions of the Uterus. By C. D. Palmer, M. D..... 201	Memoriam, In, The late A. R. Davidson, M. D 568
Medical Association, The New York State..... 236	Medical Department of Niagara University..... 569
Materia Medica, A Manual of Organic. By John M. Maisch, Ph. D..... 240	
Maisch, John M., Ph. D. A Manual of Organic Materia Medica..... 240	
Medical Society, Cattaraugus County..... 262	

	PAGE.
Menstruation, The Disorders of.	
By E. W. Jenks, M. D.....	576
Medical Association, Transactions of the New York State, for the Year 1887.....	576

N

Nerves, Trophic.....	38
Njimo Wood.....	40
Nasal Vertigo.....	80
Nymphomania, Etiology and Diagnosis of. By C. H. F. Routh, M. D.....	130
Novel Departure in Advertising.	143
Nursing, Practical Lessons in. By Edward Tunis Bruen.....	144
Neuralgia, The Treatment of, in General Practice. By Gustavus Eliot, A. M., M. D.....	157
Nitro-Glycerine, Indications for the Use of.....	226
Nomenclature, Personal.....	307
Naphthol as an Antiseptic Medicament.....	317
Niagara University, Annual Convocation of.....	425
Niagara University.....	472
Niagara University, Annual Meeting of the Alumni Association, Medical Department of.....	475
Naupathia.....	563

O

O'Dwyer, Dr. Joseph. Intubation of the Larynx.....	108
Opium Poisoning, Forced Respiration in. Its possibilities and the apparatus best adapted to produce it. By Geo. E. Fell, M. D., F. R. M. S....	145
Obstetric Synopsis. By John S. Stewart, M. D.....	432
Olive Branch in American Politics.....	520
Edema of the Lungs, A Case of.	560
O'Brien's, Dr. Nomination for the Position of Health Officer of the Port of New York.....	571

P

	PAGE.
Pasteur's Method.....	16
Pityriasis, Versicolor.....	19
Peritonitis, Experimental.....	40
Providence Asylum for the Insane and Inebriate.....	46
Pelvic Cellulitis. By Walter D. Greene, M. D.....	49
Papold, A Word as to. By Willard H. Morse, M. D.....	63
Premature Labor, Indications for the Induction of.....	71
Phthisis, Analine Treatment of..	87
Pasteur et la Rage. Par Dr. Lutaud.....	95
Pathological Anatomy and Pathogenesis, A Text-book of. By Ernst Ziegler.....	95
Phillips, Dr. Charles D. F. Certain Drugs on the Circulation of the Kidneys... ..	106
Puerperal Fever, The Prevention of.....	181
Proceedings of the American Society of Microscopists.....	191
Physicians' Visiting List for 1888,	192
Palmer, C. D., M. D. The Therapeutic Value of some Medicines in the Treatment of Hemorrhagic Conditions of the Uterus.....	201
Potter, Frank Hamilton, M. D. A Curious Effect of Cocaine ..	210
Physiology, Treatise on Human, for the use of Students and Practitioners of Medicine. By Henry C. Chapman, M. D ...	239
Potter, Frank Hamilton, M. D. Tuberculosis of the Nose, Mouth and Larynx.....	295
Placenta, Management of the, in the Third or Placental Stage of Labor.....	313
Prostatic Calculus, A Case of. By J. W. Philpott, M. D.....	164
Philpott, J. W., M. D. A Case of Prostatic Calculus.....	164

	PAGE.
Peritoneal Adhesion, The Diagnosis and Separation of, around the Displaced Uterus and Ovaries.....	327
Potter, Frank Hamilton, M. D. A Nasal Scissors.....	358
Pharmaceutical Substitution.....	364
Physician, The Observing.....	412
Potter, Fr. H., M. D. Notes on the Treatment of Acute Tonsillitis in Children.....	455
Pathology, The Relation of, to the Practice of Medicine and Surgery. By F. W. Ross, M. D..	489
Physiology, A Compend of Human. By Arthur Brubaker, A. M., M. D.....	528
Potter, William Warren, M. D. Remarks on Pelvic Inflammations and the Management of their Residues.....	530
Pharmacy in the Sixteenth Century.....	559
Phenacetine, The New Antipyretic.....	574
Pathology, Diagnosis and Treatment of the Diseases of Women. By Grailey Hewitt, M. D.....	575
Physician's Leisure Library.....	575

Q

Quinine, To Give.....	173
-----------------------	-----

R

Respiratory Organs, The Local Treatment of Diseases of the..	39
Rochester's, Dr., Successor.....	41
Remedies, New, McKesson & Robbins.....	94
Ravogli, Dr. Lupus Erythematosus.....	119
Routh, C. H. F., M. D. Etiology and Diagnosis of Nymphomania.....	130
Rectal Disorders, A Study of some of the, of Pregnant Women. By Edward Clark, M. D.....	193

	PAGE.
Rochester Pathological Society..	260
Resorcin.....	277
Respiration, Forced. Case No. 3. By Geo. E. Fell, M. D., F. R. M. S.....	345
Remedy for Croup, A Chinese...	363
Remedy for Phthisis, A Recent..	372
Respiration, Artificial. Fell's Method.....	375
Respiration, Forced, without Tracheotomy.....	401
Ravogli, A., M. D. The Hygiene of the Skin or the Art of Preventing Skin Diseases.....	431
Reflex Neurosis due to Constipation.....	471
Ross, Frank D., M. D. The Relation of Pathology to the Practice of Medicine and Surgery..	489

S

Students, Number of, in German Universities.....	15
Stockton, Dr., Successor to . . .	45
Skin Disease.....	66
Succus Alterans in Rheumatism and Syphilis... ..	88
Strophanthus Hispidus. By Dr. L. Deniau.....	165
Scarlet Fever, Preventive Inoculations for.....	169
Stenocarpine Sensation. An Attempt to Impose upon the Medical Profession.....	170
Syphilis, The Treatment of, by Hypodermic Injection.....	179
Supra-Vaginal Hysterectomy, How shall we Manage the Pedicle in.....	183
Samie, Dr. A. A Treatise on Diphtheria.....	190
Sublimate Paper as a Surgical Dressing	278
Stomach Troubles, Treatment of Chronic, by Irrigation. By Herman E. Hayd, M. D., M. R. C. S.....	289
Septic Intoxication, Contribution to the Study of.....	319

	PAGE.		PAGE.
Syphilis, The Treatment of.....	328	Thayer, W. J., D. D. S., M. D., Brooklyn, N. Y. Art of Infant Feeding.....	554
Surgery, Operative, on the Cadaver. By J. J. Garmany, A. M., M. D.....	336	Tetanus, Two Cases of.....	560
Scissors, A Nasal. By Frank Hamilton Potter, M. D.....	358	U	
Surgery.....	380	Urethral Stricture, The Treat- ment of, by Electrolysis.....	224
Skin Diseases, Photographic Illus- trations of. By Dr. Geo. H. Fox.....	383	Uterus and Morphinomania.....	227
Student Life in Switzerland.....	403	Uterine Appendages, Their Re- moval by Abdominal Section...	281
Sterility in the Male.....	411	Uterine Disorders, Sexual Rela- tions as Causes of.....	320
Shoemaker, John V. A Treatise on Diseases of the Skin.	431	V	
Stewart, John S., M. D. Obstet- ric Synopsis.....	432	Vest-Pocket Anatomist, The. By C. Henri Leonard.....	48
Syphilis of the Endometrium....	466	Very Suggestive and Promising.	228
Strophanthus, The Action of...	469	Van Duyn, Dr. J. Gun-shot Wound of the Chest.....	251
Stone in the Bladder, A Strange Case of.....	502	Von Brücke, Honors to.....	560
Snake Bite and its Antidote.....	560	W	
T		Webb, W. Windham, M. D., M. R. C. P., London. On the Treatment of Fibroids of the Uterus by Electricity.....	66
Tablet Triturates.....	17	Wathen, Dr. W. H. Rapid Dila- tation of the Cervix Uteri.....	112
Tubercular Phthisis, The Topical Treatment of.....	35	Whooping Cough, Newest Treat- ment for.....	172
Tobacco, Effects of, upon the Health.....	65	Wood, H. C., M. D., LL. D. Nervous Diseases and their Diagnosis.....	190
Thyroid Gland, Function of the.	82	Wound, Gun-shot, of the Chest. By Dr. J. Van Duyn.....	251
Tuberculosis, Treatment of, of the Larynx. By Mr. Lennox Browne.....	115	Wounds, The Treatment of, by Iodoform Tampons.....	325
Totman, D. M., M. D. A Contrib- ution to the Study of Colles Fracture.....	212	Water, The Use of, at Meals ...	369
Tyrotaxon, An Interesting Case of Poisoning by.....	222	Waters of New York Harbor....	376
Tape-Worm in Denmark.....	225	Wilson, J. C., A. M., M. D. Prac- tical Lessons in Fever Nursing	384
Tape-Worms, Ninety, in one Girl.....	264	Whooping Cough, The Bacillus of.....	406
Tobacco, The Deleterious Effects of, on the Throat and Nose...	277	Witthaus, R. A., A. M., M. D. Essentials of Chemistry and Toxicology.....	480
Tobacco, The Action of.....	279	Woody, S. E., A. M., M. D. The Essentials of Medical Chemis- try and Urinalysis.....	576
Tuberculosis of the Nose, Mouth and Larynx. By Frank Ham- ilton Potter, M. D.....	295	Z	
Telephone, The Wonders of the.	311	Ziegler, Ernst, A Text-book of Pathological Anatomy and Pathogenesis.....	95
Tubercular Meningitis in Child- ren, Early Diagnosis of. By H. L. Elsner.....	337		
Tape-Worm.....	364		
Tonsillitis in Children, Notes on the Treatment of Acute. By Frank Hamilton Potter, M. D..	455		



VOL. XXVIII.

AUGUST, 1887.

No. 1.

Original Communications.

SOME SUGGESTIONS REGARDING THE MANAGEMENT OF HYSTERICAL DISORDERS.

By EDWARD B. ANGELL, M. D., of Rochester, N. Y.

(Read before the Central New York Medical Association.)

The growing complexity of our social life, with its struggles for pre-eminence, its unceasing demands and constant tension, no doubt has had much to do with the rapid increase of that large class of nervous disorders, of which hysteria forms a predominant feature.

The common hysterical fit is, perhaps, its simplest and most fleeting expression, but it is rather the obscurer and more prolonged manifestations of the hysterical temperament with which this paper deals.

Whatever may prove to be the organic basis of this functional disorder, one peculiar psychical condition is prominent in nearly every case, a curious inco-ordination of the mental faculties. While the will is not lost, its action is materially affected. As Sir James Paget admirably remarks: "They say 'I cannot;' it looks like 'I will not;' but it is 'I cannot will.'" This ataxy of the will may result from several distinct causes, among which, as more important, may be suggested exaltation of the sensory tract, developing exaggerated ideas of peripheral irritation. In

this way pain, which ordinarily would be of little moment, becomes unbearable; the process of digestion, usually unnoticed, attracts attention and gives rise to uneasy or distressing gastric sensations, often confounded, no doubt, with real dyspeptic symptoms. The abdominal pulsations, the throbbings and beatings complained of elsewhere are, doubtless, due to this extreme sensitiveness to normal physical conditions, of which, ordinarily, we are wholly unconscious. Again, the consciousness, itself abnormally keen, may exaggerate and misconstrue sensations which are, themselves, perfectly natural. We all know the power of expectant attention, and the heightened sensitiveness it develops. Or the emotional nature has been allowed to run riot till it overtops the judgment, and all ideas are subject to its wayward caprice. With the breaking down of the controlling influence of the will, the whole being responds more immediately to the impulses sent upward from the lower nervous centers, and ideas, emotions, thought, even, and their active expression, approximate more nearly the reflex process, the patient becoming a pitiable automaton.

The psychological aspect of hysteria has been thus made prominent, since therein, in great measure, must we find explanation of the general futility of drugs in its treatment. Says Dr. Weir Mitchell, in his very suggestive work on "Nervous Diseases": "Nothing, I think, can be more melancholy than an honest survey of the amount of good done in hysteria by the host of drugs which go to form the so-called therapeutics of this disease." The varying expressions of the malady, simulating, as it does, nearly every organic affection of the nervous system, are but symptoms, and failure to cure often comes through failure to treat the real malady.

Grasset, in a recent number of *Brain*, speaking of the treatment of this disease, says: "Means of treating the paroxysm, of removing anæsthesia, of combatting single symptoms, are, perhaps, to be found in abundance, but the groundwork of the disease, the neurosis or morbid state, is not attacked."

It is rather with reference to this point that this paper was

written, while but slight allusion will be made to the therapeutical routine ordinarily employed in combatting the disease.

Toward the attainment of success in treatment, nothing is more urgent than a careful attention to the diagnosis. Trite as this observation must seem, it is of all importance in the management of the case. A most careful study of the symptoms, a searching investigation for undeniable evidences of organic mischief must be made; for when once the conclusion has been reached that the malady is purely hysterical, no assertion of new and strange symptoms must be allowed to shake the judgment or affect the purpose. Just here, homeopathy, with its certain remedy for every complaint, fails utterly, its therapeutics following ever a fleeting phantom. With the diagnosis, then, well established, determine upon the course of treatment to be pursued, and carry it out steadily and persistently, confident of ultimate success, undeterred by the intervention of fortuitous symptoms. To succeed in this, the gaining of your patient's confidence is of greatest moment. Study her character, her surroundings, her likes and dislikes, her social relations, for they all have much to do with establishing the hysterical temperament.

For this end nothing avails more than a careful, considerate estimation of her troubles. Show her you recognize the reality of her suffering, the gravity of her condition. Do not commit the error of making light of her fears and fancies as whims of the imagination; for however unreal they are from an objective standpoint, to her they have intense reality, and are undeniably significant. It matters little whether abnormal sensations arise from evident pathological conditions or from perturbed nervous action, the result, so far as the patient's consciousness is concerned, must be the same, with this exception: pain and distress from organic disease is far more wearing than the severest suffering of functional origin. Usually the hysterical subject experiences far less wear and tear than do the sympathizing friends about her. I have seen a case of hystero-epilepsy endure for hours severe muscular contortions with little subsequent fatigue, while her attendants would be

utterly worn out. Indeed, this lack of physical friction constitutes one of the marked features of this curious disease. But while considerate in all your relations, firmness in dealing with the crotchets and fancies is yet more essential. Remember, she will watch you narrowly to discover if they cause you anxiety, for hysteria has a morbid craving to perplex—instability is its nature, and it likes company. But when you do gain the mastery, when by thorough appreciation of the suffering you secure confidence, and by unruffled purpose you inspire belief, through this very lack of self-stability will come rest, re-assurance and hope—three very potent agents for good.

One of the most serious obstacles the physician has to deal with is the mistaken sympathy and over-anxiety of friends. In nervous affections of this type, often a patient's friends are her worst enemies, for their very anxiety and unceasing attention do much to feed and stimulate the emotional sensibilities you would seek to curb. All-important, then, particularly in the worst cases, is isolation. Its necessity in these cases cannot be too strongly emphasized. You break up thereby at once a whole train of evils, and bring a new set of influences to bear with powerful effect upon habits which, amidst familiar surroundings, had become well-nigh confirmed. New scenes, strange faces, rigid adherence to routine, are not congenial, and usually the first week of isolation, with a stranger for a nurse, shows a definite gain in self-control that comes through a feeling of restraint. Rarely can this advantage be secured in the patient's home. It is best obtained by removal to the seclusion afforded by a well-regulated hospital. The absence of sympathetic friends, the lack of hurtful excitement, the steady daily routine, go far toward discouraging attention to the physical vagaries which had been so exacting of attendant and patient alike. Under the influence of novel surroundings, the dormant will is aroused and opportunity secured to give wholesome suggestion and advice, if your patient chance to be intelligent and apprehensive.

Hysteria thrives best on a poor soil. In fact, we meet with very few cases that do not bear plain evidence of mal-nutrition.

The need of tonics, of fresh air, of good feeding, is well enough recognized. Its importance cannot be too thoroughly dwelt upon. But the place of nutrition is so well established, I need only refer to it here. To secure that, there is no better means than the measures first brought to notice by Dr. Mitchell and used by him with such success. The combination of rest with high feeding, massage and electricity, will make flesh and blood when all other means fail; and with improving color and weight there will come a corresponding elevation of the moral tone. I shall say little of the possible reflex causes of hysteria.

They must be sought for and removed, if possible. Yet there is need of caution in one direction particularly. Pelvic irritation may be due to over-sensitive nerve centers quite as well as to some uterine irregularity.

I do not find it serviceable to make light of the symptoms or call them imaginary ills. That would bring distrust and antagonism. Rather explain how readily the consciousness misinterprets the sensations conveyed to it by an over-sensitive nervous system, thereby exaggerating their nature and significance. Or again, emphasize the strong influence self-attention has had in accenting slight disturbances, and show how the unrestricted play of the emotional nature has intensified the susceptibilities till the judgment is warped and unable to form just conclusions regarding subjective sensations. In some such way give your patient a clear insight into the real nature of her despotic malady, the need of disregarding its manifold manifestations, and, above all, the great advantage of steadying purpose. Toward gaining this the patient must avoid, as far as possible, the evil habit of introspection, of analyzing symptoms and finding causes. She must be kept pretty constantly busy, with little opportunity for morbid self-study. The duties of the day must be such as to occupy the mind, but not weary it. Trifles, which require the exercise of a slight amount of will power, to be increased as capacity for definite application is gained, will be of service with the improving strength. But care must be exercised lest the moral and physical strength be not over-tasked. Nothing will

discourage more than exhaustion, and all required effort must stop short of that. Many times you will meet with obstinacy, or, worse, morbid perversity. You may be made the target for the venting of personal malice and spite, and rarely will the physician experience a more trying test of self-control than such an encounter affords. Yet at no time is the opportunity for good greater, since an unruffled demeanor will have marked influence in cutting short such emotional paroxysms. I will admit that, under certain provocation, an assumption of high-minded indignation may be called for, but it is a weapon requiring utmost care in its use. An emotional nature is very strong for a brief period, but it is quickly exhausted and cannot withstand the power of steady, undisturbed purpose. Direct command has usually little weight. Rather win your battles by tact and skill. Encourage effort, praise success, be patient with failure.

Suggestion is a power if coupled with approval over honest effort, however successful. It should find expression not alone by word but by conduct as well. The hysterical mind acutely conscious of her own sensations is very watchful of expression and action on the part of those about her. Be wary of showing surprise or anxiety over new symptoms. Assiduous attention to her varying tale of ailments but feeds an exacting appetite. We all know how dearly many women love to dwell upon and discuss their aches and ills with each other, and with the hysterical this morbid craving for personal sympathy becomes a passion. So far as possible, this same disregard of fugitive symptoms must enter into the treatment. Here judicious neglect will often cure, where direct attention might but add importance and establish persistence. This need of consistent effort in one direction, looking toward the cure of the essential malady rather than the relief of its symptoms, cannot be too strongly commended, for the sake of the suggestive influence such a course has upon the patient herself. If, on the contrary, you let her find she can sway your judgment at will by constant and varied complaints, your influence is gone, for no sooner will one symptom be conquered ere a new expression will demand attention, and your list of antispasmodics, analgesics and alteratives, extensive as it is,

will speedily be exhausted. Indeed, it is far safer to disregard entirely all subjective symptoms and be guided only by objective signs, the result of careful investigation from time to time. She complains of terrible distress in her stomach, possibly regurgitates her food, but if the stools are fairly regular and indicative of good digestive action, while her body weight only alters for the better, be not deceived by her complaints, for in due time they will be forgotten, killed by intentional neglect.

A few words need be said about the nurse, for she plays a most important part. She requires tact, discretion, firmness, and the rare ability to execute orders with little attendant fuss. She should be attractive both in appearance and bearing, and should command the respect as well as win the good will of her patient. If officious or too familiar, if impatient or too slow, she will usually prove unsatisfactory, and a change had best be made; for a poor nurse is as mischievous as a good one is helpful. It is manifestly wiser, in general, to discuss progress and give orders aside, as the patient is keenly sensitive to derogatory remarks or partially-understood directions; while few nurses would jeopardize their comfort by giving unvarnished reports in her presence.

Little need be said regarding the use of drugs, nor can much be asserted of their value, except as aids to the general nutrition or makeshifts to cover too clamorous symptoms. Their sphere is largely secondary, and choice may be made according to the particular need. He who relies upon their efficacy and exhausts his mathematical skill in arranging their permutations and combinations will usually fail, at least, of that larger success the true physician works for—the ultimate cure of the morbid nature. But with time, that very important factor in the treatment of all nervous ailments, with improved nutrition from careful but generous diet and efficient though not fatiguing exercise, with the aid of a well-trained nurse, and, above all, with a skillful application of moral force, will you not only emancipate your patient, but you will teach her to know herself and her disease, how to care for the one and avoid the other.

THE FALLACIES OF POPULAR BACTERIAL RESEARCH.

By GEORGE W. LEWIS, JR., A.M., M.D., BUFFALO, N. Y.

I venture to say that every science has suffered more or less in its earlier development from the unprincipled and ungarded assertions of a certain well-defined class of men whose only prompter is an insatiate desire for notoriety, and whose only qualification that attracts attention to their sweeping statements is an established position in some other calling. I don't know that I should say "suffered from such assertions;" rather, perhaps, should it be, benefitted from them, for later on it is these very statements, far-reaching and groundless as they are, that serve by their contrast to strengthen and to disseminate the underlying principles of that science. It suffers only through the delay caused by the heaping on of so much trash and the consequent sifting that is rendered necessary.

The striking features, however, of these so-called "new discoveries" and empty criticisms are (1) that they are not advanced, as a rule, until their supporters realize that the subject has assumed enough importance to warrant the attraction of popular attention to their statements; and (2) that the promulgators of the class of work to which I refer are as profoundly ignorant of their subject as the most superficial knowledge of it can well make them. I take it that Pope's expression, "A little knowledge is a dangerous thing," was meant particularly for this class of individuals. Nevertheless, we all know that the more reckless and sweeping the assertion the more certain it is to attract widespread attention, and this is the only object its maker desires. It matters little to most of them how soon it is disproved, so long as timely notice is taken of it. It may be stated as a well-based induction that the more careful the investigator and the more complete his mastery over the endless practical difficulties which surround experimentation on his subject, the more certain are his experiments to give a guarded result; while extravagant and unfounded assertions are no less sure to crown the efforts of the unskilled.

These general remarks are intended as a preface to the subject in hand, for I don't believe that any science has ever suffered more for the cause of notoriety than has bacteriology. The reason for this seems to lie largely in the fact that the science is being developed under very peculiar circumstances. In the first place, it is one of the few technical sciences in which the great mass of people takes deep interest. It is easy, therefore, for those possessed of only a superficial knowledge to play upon the popular mind. If no more harm were done, there would be little cause for writing. But taking advantage of the combined deep interest, yet profound ignorance, of the masses, there has sprung up a vast number of self-styled discoverers, whose efforts, instituted solely for advertising purposes, being little less than ridicule upon the germ theory of disease. Private laboratories, fitted up with costly apparatus, are made to stand for extensive experimental research on the part of the owners, and, in their own immediate circles at least, no opportunity is lost to impress others with the idea that they are more or less closely identified with the onward progress of the science. Another cause, which undoubtedly militates against the speedy uprootal of this sort of charlatanism, is the impetus given it by the outbreak of an epidemic. Here a deal of notoriety is gained at the expense of popular fear.

Scarce, indeed, are the issues of even our most representative medical journals in which more or less space is not given up to "new discoveries" in bacteriology, always, of course, associating the name of Dr. So-and-so as the discoverer. Occasionally a few unimportant details relative to the peculiar circumstances under which the discovery was made, and calculated solely to enlist the popular mind, are given. Very seldom is mention made of culture or inoculation experiments, but great stress is always laid upon the microscopic appearances of the organism, and the easy or difficult manner in which it takes the stain, and perhaps other comparatively worthless data. More often, however, we are simply informed that the discovery has been made, and unfortified by details that would assist subsequent observers

in confirming the experiments, all else is left as the work of a prolific imagination.

Now and then the monotony of "new discovery" trash (this word in lieu of a better one) is varied by a vigorous and wordy attack upon some demonstrated and generally-accepted organism. It seems unnecessary to add that the success or failure of such attacks depends largely, so far as the desired notoriety is concerned, upon the ability of the ones who make them to replace the blighted (?) remains of the old theory with a "new discovery." Sometimes the devices resorted to and the claims made are to say the least unique. A fair sample of the indefiniteness which invariably characterizes such work is seen in the following, which appeared in the editorial columns of the *New York Medical Record* of February 26, 1887, and upon which the editor passed a very just criticism.

The article has reference to the report of the cholera commission dispatched to Spain last year by the combined action of the Royal Society, the University of Cambridge, and the Association for the Promotion of Scientific Research. The commission consisted of Drs. Roy, Graham, Brown and Sherrington, and a review of their report is thus given by the journal named: "Twenty-five typical cases of cholera were examined either immediately or at a short interval after death, with the result that Koch's comma bacillus was not discovered in the intestinal canal in all the cases. In some this microbe was present in great abundance; in others it was far less conspicuous; while in many undoubted cases, where death occurred before the re-action stage set in, it could not be detected at all. These observations were confirmed by the results of plate cultivations in gelatine and agar-agar. Moreover, it was found that, when present, the comma bacilli were collected either on the surface of the mucosa or so close to it as to suggest a penetration of the epithelium after death, but in the majority the organism could not be found in the mucous membrane, or in any of the tissues and organs. These results, which are directly opposed to Koch's, are considered to be conclusive against the bacillus, having a pathogenetic

relation to the disease, but it is suggested to be the cause of the premonitory diarrhoea, which is held not to be a mild attack of Asiatic cholera, but only a predisposing condition. Having satisfied themselves that the comma bacillus is not the cause of cholera, these investigations similarly dismiss the claims of Emerich's straight bacillus to that distinction, and also state that they were unable to recognize Klein's straight bacillus in any of their preparations."

I have also read a copy of the original report, and the above is as concise a review of it as can be given. Here we have a good illustration of the broad assertions unsustained by reliable evidence to which I have referred in the first part of this paper. The report is based upon an examination of only twenty-five cases. Compare this with Koch's three years of uninterrupted study in cholera-infected localities before a single utterance was given to the world. The commission is frank to acknowledge that its report is somewhat premature, further investigation being needed, especially in the line of artificial cultivation. Its hasty dismissal of Koch's theory is unwarranted and savors strongly of English prejudice. Its reasoning, too, shows a lack of familiarity with Koch's views. Now listen to the indefinite character of what might naturally be expected to follow: "After much research another fungus was discovered which is believed to be pathogenetic. It consists of granular masses and a delicate mycelium, which could not be stained without difficulty, and was pronounced by Messrs. Vine and Gardiner to belong to the crytridiaceæ, a class which includes many rapidly-growing and virulent parasites of vegetables. The difficulties of its detection may have led to its being overlooked by former observers, while the objection of possible after-contamination is met and refuted."

The criticism offered by the editor is as follows: "It is, we venture to say, highly improbable that the researches above described will have much weight against the long-continued and careful observations of a trained mycologist like Koch."

The societies represented by these four men are the leading organizations of Great Britain in scientific research, but I doubt

if much reliance is placed by them in the report of this commission. Their proceedings are usually both definite and trustworthy, but here both characteristics are lacking. Is there a single sentence in the whole report that conveys the slightest clue to assist subsequent observers in confirming their views? Not one that I can detect. They say the new fungus consists of granular masses and a delicate mycelium which cannot be stained without difficulty. They even go so far as to classify the new fungus. Now, what fungus, pray, does not consist of granular masses and a more or less delicate mycelium? These are the two known characteristics of all fungi. With regard to the difficult staining, I shall have occasion later, in speaking of the tubercle organism, to refer to its unreliability as a primary factor in diagnosis. It is valuable only as a confirmatory measure. Moreover, it is not by any means a constant quality even in the same organism. Subject, for example, several cultures of a given bacterium to different conditions of temperature and nourishment, each one maintained at the same throughout its growth, and you will be sure to notice degrees of stain-taking. This is, perhaps, less noticeable in the tubercle bacillus, on account of its limits of temperature being more closely defined.

The position which bacteriology occupies to-day in its relation to health and disease has been gained solely through perfected methods of studying minutely the life histories of the various organisms known to us, and yet the implicit confidence which is placed by many in microscopic appearances as a basis of diagnosis in bacterial affections clearly indicates the utter unreliability of a large proportion of the work done in this field. For the purpose of ascertaining beyond all doubt whether a micro-organism is actually the *causa causans* of a disease, Koch has laid down the following postulates, which are strictly adhered to by all careful workers: (*a*) The micro-organism must be found in the blood, lymph or diseased tissues of man, or animal, suffering from, or dead of, the disease; (*b*) the micro-organisms must be isolated from the blood, lymph or tissues, and cultivated in suitable media outside of the animal body—these pure culti-

vations must be carried on through successive generations of the organism; (c) a pure cultivation thus obtained must, when introduced into the body of a healthy animal, produce the disease in question; (d) lastly, in the inoculated animal the same micro-organism must again be found. These steps naturally suggest a sequence in the various processes which must be adopted in a practical study of micro-organisms associated with disease.

Notwithstanding the axiomatic character of these postulates, and, in reality, the short time required for the execution of the necessary steps in each, we are every now and then led to believe, from articles in our journals, that more speedy and quite as trustworthy diagnoses can be made from microscopic examinations of the discharges peculiar to the diseases in question. This is particularly the case with tuberculosis. The methods of treating the sputum previous to the examination are both varied and numerous, each having its devotees; but they all unite in a dependence upon difficult stain-taking as the one strong point in the diagnosis. Biedert, whose plan, as given in the *Medical Record* of March 19th, is perhaps the latest, claims that the smallest possible number of bacilli, if present, can be detected. The essential features of his method are as follows: "A tablespoonful of the suspected sputa is added to twice that quantity of water and fifteen drops of a strong solution of soda. This mixture is boiled until it becomes quite fluid, and then diluted with about two ounces more of water. After being again boiled, the mixture is nearly homogeneous, and free from lumps and particles. If, on cooling, a thin fluid does not result, more water may be added. A conical vessel now receives the mixture, and after two or three days the supernatant fluid, having deposited its bacilli, can be decanted. The sediment, after energetic stirring, can now be examined in the ordinary manner." This method is open to additional objection on account of the dangers of after-contamination.

From the comparatively healthy mouth there have been isolated various micro-organisms that, so far as known, have no pathological significance. Any uncleanly condition, arising from

laxity in the use of the brush or tooth-pick, whereby animal and vegetable matters are exposed to the process of decomposition, greatly increases the number and character of these organized bodies. The saliva, too, teems with living creatures, which, like the above, under the microscope bear a close resemblance to each other. How, then, I ask, can a trustworthy diagnosis be made from microscopic examinations of sputum, which contains, besides the possible tubercle bacilli, numerous other bacteria of like form and appearance? It will, no doubt, be claimed that a sufficient distinction can be arrived at through the staining peculiarities of the tubercle organism. Here, however, I would say that at least two of the non-pathogenic forms from the human mouth (Weinhauer's *Bacillus* and Babe's *Bacillus*), with which the writer is acquainted, can only be stained successfully by adopting some one of the methods recommended for the tubercle bacillus. In fact, several of the species found in the mouth were not discovered till late, on account of the difficulties experienced in staining them. Reference has been made, moreover, to the inconstancy of this quality of stain-taking, owing to the influence of different conditions of temperature and nourishment upon their organization. If the tubercle bacillus possessed distinctive microscopic characteristics, like the Anthrax *Bacillus* for example, there would be cause for placing some reliance in its appearance, but, unfortunately, it has no characteristic under the microscope that is not shared equally by other bacteria in the field of vision.

If the discovery of the tubercle bacillus is to have any real value from a therapeutic standpoint, it is essential that it be detected in the incipient stage of the disease. To do this requires not only a very exact primary method, but all the available checks that can possibly be interposed in the various steps necessary for its confirmation. The one respect in which all micro-organisms differ is their manner of growth. Here, then, is manifestly the starting point from which every reliable diagnosis of bacterial disease must proceed. Other measures of whatsoever sort are to be regarded as subservient to this, and to be of value only so far as they confirm the steps already taken.

Before closing this paper, I wish to speak of the importance of maintaining an even temperature throughout the growth of the organism. It is a feature in bacterial study too often neglected, and one which, if allowed to pass unheeded through successive generations, is certain to result in more or less pronounced modifications as regards structure and development. It is a question, too, whether intentional neglect in this respect will not, in time, check, or even destroy permanently, the pathogenetic tendencies of many of the bacteria. Every organized body has its normal limits of temperature, beyond which it cannot pass without suffering. It is a factor in their well-being next in importance to suitable nourishment. There is little doubt that these unicellular bodies are quite as sensitive to changes in temperature as are the most complicated and highly-developed of the vegetable kingdom.

Miscellany.

NUMBER OF STUDENTS IN GERMAN UNIVERSITIES.—The number of students of medicine in the various universities during the past winter *semester* was as follows:

Vienna	2,318	Fribourg	428
Munich	1,350	Breslau	362
Berlin	1,297	Halle	315
Wurtzburg	935	Bonn	292
Dorpat	868	Marbourg	271
Leipzig	781	Erlangen.	267
Graz	548	Zurich	241
Greiswald	441	Koenigsberg	237
Tubingen.	235	Kiel	234
Goettingen	233	Strasbourg	233
Innsbruch	231	Berne	227
Jena	210	Heidelberg	202
Giessen	138	Basle	131

In the Paris *salon* for 1877 is a picture entitled, "A Clinic at the Salpetriere," representing Charcot giving a clinical lecture on hysteria.

The most interesting feature of the painting is a young girl in the arms of Dr. Babinski, Charcot's assistant. She is having a violent convulsion and has succeeded in disrobing herself almost to the point of nudity, while the throng of students are eagerly watching the symptoms of the disease (?) There is also in the *salon* a picture entitled, "Before the Operation," representing the surgeon Péan lecturing to his class, and a picture of Prof. Peter, the opponent of Pasteur. The French medical press justly condemns this unique method of advertising as derogatory to the dignity of the profession. It is claimed that the picture of the girl affected with hysteria has taught many a mademoiselle to have convulsions in the latest and most approved fashion.

"MEDICAL CLASSICS" is the name of a new medical journal, the first number of which has just reached our table. The journal is largely composed of selections from the writings of the fathers of our art. We believe that this is an enterprise which deserves the support of the profession. We devote altogether too much time to trial of new drugs and the study of new theories, while no attention whatever is paid to the history of medicine. In our profession, as in other departments of life-work—

"We watch the wheels of Nature's plan
And learn the future by the past of man."

We notice some quotations in the original Greek which will be of especial interest to some of our local physicians who demonstrated, by the recent civil-service examination, that they have no knowledge of the English tongue.

PASTEUR'S METHOD.—The English Commission has reported to the home government that Pasteur's method is as truly a preventive of rabies as Jenner's method of vaccination is of small-pox.

Over against this we may present the report of the Austrian Commission made by Prof. Grisch:

"1. The method of Pasteur is still too imperfect to insure to animals an immunity from rabies.

"2. Preventive inoculations practiced upon men who have been bitten by rabid dogs is not based upon well-determined facts.

"3. The preventive method of Pasteur may possibly produce rabies in a previously healthy person."

ON the occasion of the ninth convocation of the International Medical Congress, at Washington, a large and capable staff of medically-educated stenographic reporters, under the supervision of a responsible chief, will be in attendance, in the interests of *The Medical Record*. They will prepare a condensed report each day of the proceedings of the general sessions and various sections, which, with graphic accounts of the social incidents, and interesting items of news and gossip, will each day be telegraphed to the publication office of *The Medical Record*, in New York, and immediately prepared by the editorial staff for publication in its current issues. By the kindness of *The Record* the JOURNAL will receive these reports.

TABLET TRITURATES.—Physicians are becoming more and more appreciative of the advantages which these elegant preparations afford. Messrs. Wyeth Brothers' advertisement in this number furnishes a list, which embraces every drug now demanded, and the doses are so graduated as to meet every indication. It is obvious that, in the making of these preparations, the physician is compelled to rely upon the integrity of the manufacturer. We have used Wyeth's triturations largely, and they have never failed to give us the expected effect. The writer has personally visited the laboratory of this house, and the confidence inspired then by the perfection of the processes employed in manufacture, and the quality of the drugs and chemicals inspected, has been sustained in every case by the use of these preparations in actual practice.

TREATMENT OF DIARRHŒA BY IODOFORM AND CHARCOAL.—Picchini treated eight cases of diarrhœa, with symptoms of fermentation, with the following:

R	Iodoform,	.	.	.	.	.	grs. 9.
	Ether,	.	.	.	.	.	℥ 3 $\frac{3}{8}$.
	Vegetable charcoal, finely powdered,	.	.	.	.	.	℥ 3 $\frac{3}{8}$.
	Glycerin, ad.	.	.	.	.	.	℥ 12.

The iodoform must be dissolved in the ether, and the powdered charcoal thoroughly mixed. After the ether has evaporated, the glycerin should be added. To take in twenty-four hours, by teaspoonful or tablespoonful, suspended in a glass of water.—*Journal de Médecine*.

JULES SIMON recommends the following in the treatment of infantile eclampsia :

Musk,	gr. iij.
Camphor,	gr. xv.
Chloral hydrat.,	gr. viiiss.
Yolk of egg,	no. i.
Distilled water,	℥ iv.

M. Sig.—Use as enema after the intestines have been emptied.

BUDIN gives the statistics of lying-in department of *La Charite* as follows :

Total number of confinements during the four	
years from 1883 to 1886 inclusive,	1,349
Total deaths,	21 or 1.58 per ct.
Deaths from infectious diseases,	9 or 0.66 per ct.
Deaths from infectious diseases con-	
tracted in hospital,	4 or 0.29 per ct.

PERMANGANATE of potash is the latest remedy for malarial fever. The discovery of its curative properties in these affections was made by Dr. I Vroz, of the Virgin Islands, who observed that women suffering from malarial affections and dysmenorrhœa were cured of both diseases by the administration of from one-half a grain to a grain of potassium permanganate three times a day.

SALKOWSKI and Wolf have recently been studying some cases of fatal poisoning from the use of molluscs. Even common oysters and clams may be poisonous if these shell fish are grown in stagnant water or in motionless water of harbors. The poison is contained exclusively in the liver and is destroyed by the action of heat and by soaking in a solution of bicarbonate of soda.

BALSHEROLSKI has made a comparative study of the antiseptic values of the biniodide and bichloride of mercury. He concludes that the bichloride is more easily managed and is more efficient for the destruction of the bacillus of carbuncle. The biniodide, on the other hand, is more destructive to the bacteria of suppuration in staphylococci.

PITYRIASIS VERSICOLOR.—Besnier of Paris recommends the following pomade in the treatment of this obstinate affection :

Acid salicylic,	gr. xlv.
Sulphur precipitat.,	3 iiss.
Lanolini.	
Vasellini,	aa 3 iss.

M. Sig.—Apply thoroughly after washing part affected.

THE Norwegian Government has taken another step towards discovering the origin and nature of leprosy, which is so common on the west coast of Norway, by dispatching Dr. G. A. Hansen, director of the Leprosy Hospital at Bergen, to this country, for the purpose of inquiring into the heredity of the disease among Scandinavian emigrants to the United States.

PROF. A. VOGEL has observed that plants do not always contain their characteristic alkaloids when grown under other than natural conditions. Hemlock does not yield conine in Scotland, and cinchona plants are nearly free from quinine when grown in hot-houses. Tannin is found in the greatest quantities in trees which have had a full supply of direct sunlight.

A WRITER in an exchange informs us that on several occasions he has prescribed belladonna for sterile women, and has found that, after taking it for several weeks, they have become pregnant. *Moral*—Unmarried women should let belladonna severely alone!—*Ex.*

MEDICAL LOGIC.—A physician observed that 20 per cent. of the men present at a grand opera were bald-headed. A few nights afterward he noticed that but 5 per cent. of the men at a comic opera were bald-headed. *Ergo*, comic opera is a hair restorer.

A RUSSIAN surgeon, Jarochevski, has discovered that strychnine will counteract the narcotic effects of alcohol. Large quantities of alcohol may be imbibed without producing intoxication, provided strychnine is given at the same time.

A GEORGIA doctor has recently successfully performed a cæsarian section on a cow. Mother and calf are both doing well.

A TOOTH immersed in a solution of tincture ferri chloridi, one to eight, will have its enamel entirely destroyed in one hour. In prescribing tincture of iron, therefore, alcohol, glycerine or syrup should be employed as a vehicle.

DR. V. HORSELEY has succeeded in removing a tumor from the dorsal portion of the spinal cord. The diagnosis was made by Dr Gowers, who suggested operative interference. The tumor measured $1\frac{1}{4}$ by $1\frac{1}{2}$ inches.

INJECTION FOR GONORRHOEA :

Salol,	.	.	.	.	.	3 iiss.
Gum. acaciæ,	.	.	.	.	.	3 iss.
Aq.,	.	.	.	.	.	3 iv. M.

World's Med. Review.

THE President has appointed Dr. George M. Sternberg to investigate the subject of inoculation as a preventive in yellow fever, as recently practiced in Brazil and Mexico.

AN epizootic of a disease resembling gonorrhœa is prevalent among the cattle of some parts of Switzerland. The disease renders the cows sterile and becomes chronic.

LABOULBIM has determined that water is the usual vehicle for the transmission of the eggs of ascarides. The common filter will remove these spores from the water.

TWENTY-ONE hospitals of New York city, with the aid of the dispensaries, treated over 122,000 people, at an expense of over \$600,000, last year.

AN exposition for the study and illustration of infant hygiene is soon to be held in Paris. This is the first enterprise of the sort ever proposed.

THE Homœopathic colleges of the United States have graduated 1,996 physicians in the past five years.

WOMEN students are hereafter to be excluded from the German universities.

KINESITHERAPY is the name given by European physicians to the Swedish movement cure.

FRENCH physicians recommend ergotine in the treatment of meningitis and cerebral hemorrhage.

LAC CANINUM (bitch's milk) is a new remedy introduced by a homœopathic physician.

THE University of Nebraska has discontinued its medical department.

SMALL-POX is epidemic in the eastern portion of the island of Cuba.

THERE are twenty-two female dentists in England.

CARL FRIEDLANDER, the pathologist, is dead.

Selections.

CODIFIED MEDICAL LAW OF NEW YORK STATE.

The following will doubtless be of interest to our readers :

CHAPTER 647.

An Act to regulate the licensing and registration of physicians and surgeons, and to codify the medical laws of the State of New York.

Passed June 23, 1887; three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows :

SECTION 1. No person shall practice physic or surgery in this State who shall not have attained the age of twenty-one years; and no person shall practice as aforesaid unless he or she shall be, at the time this act shall take effect, a person lawfully engaged in such practice in this State under license or authority conferred by its laws then in force, and lawfully registered pursuant to chapter five hundred and thirteen of the laws of eighteen hundred and eighty, and the acts amendatory thereof, or unless he or she shall be licensed or authorized so to practice by the provisions of this act, and registered as herein prescribed.

SEC. 2. From and after the date of the taking effect of this act, no person not theretofore licensed or authorized to practice physic or surgery in this State shall be deemed so licensed or authorized except one of the three following classes :

First. All who shall have been graduated from an incorporated medical school or college in this State with the degree of doctor of medicine, after substantial compliance with all the requirements of the general laws and of the charter of said corporation regulating the term and amount of study, attendance and attainment requisite to obtain said degree ; provided that no person shall receive the degree of doctor of medicine, or be licensed to practice physic or surgery in this State, unless after the age of eighteen he shall have pursued the study of medical science for at least three years in a chartered medical school or with some physician or surgeon duly authorized by law to practice physic or surgery ; and shall have attended two complete courses of lectures in some legally incorporated medical school or college, in good standing at the time of such attendance, prior to the granting to him or her a diploma or license ; provided, further, that two courses of lectures, both of which shall be either begun or completed within the same calendar year, shall not satisfy the above requirement.

Second. All who have received said degree from the Regents of the University of the State of New York after substantial compliance with the legal requisites preliminary to its attainment, and after examination by a legally constituted board of medical examiners of this State.

Third. All who, having been graduated from incorporated medical schools or colleges without the State as doctors of medicine, or licensed to practice physic or surgery under the laws of those European countries in which said degree does not confer the right so to practice, shall procure their diplomas from said corporations, or their licenses from such countries, to be indorsed by the faculty of an incorporated medical school or college within this State, or by the Regents of the University on the recommendation of a legally constituted board of medical examiners of this State. Every such indorsement shall be in form of Schedule A or of Schedule B provided by the tenth section of this act. Every corporation or board so indorsing, shall keep a record of their indorsements, and may require applicants to verify their statements under oath ; any indorsement made with fraudulent intent, or gross carelessness or ignorance, shall be deemed a misdemeanor and shall subject the indorser or indorsers, upon conviction thereof, to a fine of two hundred and fifty dollars.

SEC. 3. Every person who, at the time this act shall take effect, shall be practicing lawfully physic or surgery in this State, under the authority and license conferred by the laws then in force, but who shall not be then duly registered in the county where he or she practices ; and every person who shall thereafter become lawfully authorized or licensed to practice physic or surgery in this State, shall register in a book to be kept in the clerk's office of the county in which such practice is carried on, his or her name, residence, place and date of birth, and authority for practicing as aforesaid. Every person who shall apply to register as a physician or surgeon shall be required, before registration, to subscribe and verify by oath or affirmation, before a person qualified to administer oaths in this State, an affidavit which shall be filed and preserved in a bound volume. This affidavit shall be in the form prescribed in

Schedule C, provided by the tenth section of this act. Every person registering as aforesaid shall exhibit to the county clerk his or her diploma or license, or in case of loss, a copy of either, legally certified as are copies of documents admitted in evidence, or a duly attested transcript of the record of its conferment from the body conferring it, upon which the said clerk shall indorse or stamp his name, and the words "Presented and registered as _____ authority to practice physic and surgery by _____, on the _____ day of _____, in the clerk's office of _____ county."

The said clerk also give to every registered physician or surgeon a certificate in the form of Schedule D, provided by the tenth section of this act. For all of his said services the county clerk shall receive as a total fee for registration, affidavit and certificate the sum of one dollar. It is provided, however, that nothing in this act shall require any physician or surgeon who shall have duly registered lawful authority to practice as such, conformably to the provisions of chapter five hundred and thirteen of the laws of eighteen hundred and eighty, and the acts amendatory thereof, to register again under the provisions of this act, in any county where he or she shall have registered already.

SEC. 4. A practicing physician or surgeon having registered lawful authority to practice physic or surgery in one county, who shall remove his practice or part thereof to or regularly engage in practice or open an office in another county, shall exhibit in person to the clerk of such other county, or shall send to him through the mail by registered letter, his certificate of registration, and if such certificate shows lawful authority to have been registered, said clerk thereupon shall register said applicant in said latter county, on receipt of a fee of twenty-five cents. The clerk shall stamp or indorse upon such certificate the words "Registered also in _____ county," and return the same, and every certificate and indorsement made pursuant to the provisions of this act shall be prima facie evidence in any legal proceeding that the person named has registered in the office issuing the same, the authority stated in the transcript.

SEC. 5. Every person now licensed to practice physic or surgery in this State under the laws thereof in force at the time of the conferment of such license, unless he or she already shall have registered his or her name, residence, place of birth and authority so to practice pursuant to the provisions of section two of chapter five hundred and thirteen of the laws of eighteen hundred and eighty, and the acts amendatory thereof, shall comply with said requirements of said chapter on or before the first day of October, eighteen hundred and eighty-seven; and thereafter no person shall be entitled to register any authority to practice physic or surgery, except the license conferred under this act, and the laws enacted hereafter, and no registration shall be considered valid as such unless the authority registered constituted at the time of registration a license under the laws of this State then in force; provided that nothing in this section shall be construed to prohibit or suspend any prosecution for non-registration under said section instituted prior to said first day of October, eighteen hundred and eighty-seven, and further provided, that no diploma or license conferred upon a person not actually in attendance at the lectures, instruction and examination of the corporation conferring the same, or not possessed at the time of its conferment of the requirements then demanded of medical

students in this State as a condition of their becoming licensed so to practice, shall be deemed lawful authority to practice physic and surgery in this State.

SEC. 6. No person shall be licensed or permitted to practice physic or surgery in this State who has been convicted of a felony by any court of competent jurisdiction ; and if any person who is or hereafter shall be duly licensed to practice physic or surgery in this State, shall be convicted of a felony, as aforesaid, his or her license to so practice, if any, shall be revoked by the fact of such conviction having been had. Any person who shall willfully swear falsely to any statement contained in any affidavit made pursuant to the provisions of this act, shall be deemed guilty of a felony, and subject to conviction and punishment for perjury ; any person who falsely and without authority shall counterfeit, make or alter any diploma, certificate or instrument constituting a license to practice physic or surgery within this State, or any certificate or indorsement given in pursuance of this act, shall be deemed guilty of a felony, and be subject to conviction and punishment for forgery in the second degree ; any person who shall practice physic or surgery under a false or assumed name, or who shall falsely personate another practitioner of a like or different name, shall be deemed guilty of a felony, and shall be subject to conviction and punishment for false personation ; and any person guilty of violating any of the other provisions of this act, not otherwise specifically punished herein, or who shall buy, sell or fraudulently obtain any medical diploma, license, record or registration, or who shall aid or abet such buying, selling or fraudulently obtaining thereof, or who shall practice physic or surgery in this State under cover of a diploma or license that shall have been illegally obtained, or that shall have been signed or issued unlawfully or under fraudulent representations, or mistake of fact in material regard, or who, after conviction of a felony, as aforesaid, shall attempt to practice physic or surgery in this State, and any person who shall assume the title of doctor of medicine, or append the letters " M. D." to his or her name, without having received the degree of doctor of medicine from some school, college or board empowered by law to confer said degree or title, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than two hundred and fifty dollars, or imprisonment for six months for the first offense, and upon conviction of a subsequent offense, by a fine of not less than five hundred dollars or imprisonment for not less than one year, or by both fine and imprisonment. Any person who, not being then lawfully authorized to practice physic or surgery in this State and so registered according to law, shall practice, on or after the first day of October, eighteen hundred and eighty-seven, physic or surgery within this State without the license and registration provided for in this act, shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punished by a fine of not less than fifty dollars for the first offense, and for each subsequent offense by a fine of not less than one hundred dollars, or by imprisonment for not less than one hundred days, or by both fine and imprisonment. When any prosecution under this act is made on the complaint of a lawfully incorporated medical society of this State, or a county society entitled to representation in a State society or association, the fines when collected shall be paid to the society making the complaint, and any excess of the amount of fines so paid over the expense incurred by the said society in

enforcing the medical law of this State, shall be paid at the end of the year to the county treasurer, for the use of the poor of said county.

SEC. 7. The duly incorporated medical societies of any county in which any person shall practice physic or surgery without lawful authority or registration may, upon proof of such practice, recover from such practitioner, in an action before any justice of the peace, a penalty of twenty-five dollars and the cost of the action for the first judgment, and upon every subsequent judgment for the same offense a penalty of fifty dollars and the cost of the action; provided that said societies shall pay to the county treasurer for the use of the poor of said county any surplus that may accrue in their hands from the excess of fines and penalties collected over the disbursements of said society for counsel fees and the expenses incident to the enforcement of this act by them.

SEC. 8. Nothing in this act shall be construed to punish commissioned medical officers serving in the army or navy of the United States, or in the United States marine hospital service, while so commissioned, or any one while actually serving as a member of the resident medical staff of any legally incorporated hospital, or any legally qualified and registered dentist exclusively engaged in practicing the art of dentistry, or interfere with manufacturers of artificial eyes, limbs or orthopedical instruments or trusses of any kind from fitting such instruments on persons in need thereof; or any lawfully qualified physicians and surgeons residing in other States or countries meeting registered physicians and surgeons of this State in consultation, or any physician or surgeon residing on the border of a neighboring State, and duly authorized under the laws thereof to practice physic or surgery therein, whose practice extends into the limits of this State; providing that such practitioner shall not open an office or appoint a place to meet patients or receive calls within the limits of the State of New York; or physicians duly registered in one county of this State, called to attend isolated cases in another county, but not residing or habitually practicing therein.

SEC. 9. The following acts and parts of acts are hereby expressly repealed, to-wit: Sections eight to twenty-two inclusive of title seven of chapter fourteen of part one of the Revised Statutes; also all of chapter one hundred and thirty-eight of the laws of eighteen hundred and six, that provided for the examination and admission of medical students to practice, and for penalties for practicing physic and surgery without a diploma or other lawful authority; also section or paragraph fifth of chapter one hundred and four of the laws of eighteen hundred and seven; also sections nine, ten, eighteen and all of section eleven following and including the words "whose duty," of chapter ninety-four of the laws of eighteen hundred and thirteen; also sections one, two, four, and all of section three following and including the words "any three," of chapter two hundred and six of the laws of eighteen hundred and eighteen; also section two of chapter two hundred and thirty-seven of the laws of eighteen hundred and nineteen; also chapter one hundred and twenty-six of the laws of eighteen hundred and thirty; also sections one, two and four of chapter five hundred and thirty-two of the laws of eighteen hundred and thirty-six; also chapter sixty-four of the laws of eighteen hundred and forty-one; also chapter two hundred

and seventy-five of the laws of eighteen hundred and forty-four; also chapter four hundred and thirty-six of the laws of eighteen hundred and seventy-four; also chapter five hundred and thirteen of the laws of eighteen hundred and eighty; also chapter one hundred and eighty-six of the laws of eighteen hundred and eighty-one; also chapters four hundred and eleven and four hundred and forty-five of the laws of eighteen hundred and eighty-four; also section three hundred and fifty-six of the Penal Code. And also all acts or parts of acts authorizing any incorporated school or college to confer the degree of doctor of medicine *causa honoris* or *ad eundem*, or otherwise, than upon duly graduated students in course; and all other acts or parts of acts inconsistent with this act are hereby repealed. And it is provided that the degree of doctor of medicine conferred *causa honoris* or *ad eundem gradum*, shall not be a qualification for the practice of physic and surgery in this State. And, whereas, it is the purpose of this act to codify the statutory provisions of this State regulating the admission of individuals to the practice of physic and surgery, and the punishment of those practicing either physic or surgery without authority. It is further provided that the specific repeal herein of any portion of an act that may have been heretofore repealed, expressly or by implication, shall not be construed to revive the remaining part thereof.

SEC. 10. Section ten shall embrace the following schedules, namely A, B, C and D. * * *

[Here follows forms for registration and for the endorsement of diplomas.]

MODES OF DISGUISED THE ODOR OF IODOFORM.*

The odor of iodoform being very offensive to many persons, and at least disagreeable to all, many modes of masking its odor without affecting its therapeutic action have been proposed.

Of this number I have tried the following, which I will number for convenience :

NO. I.

Iodoform. 2 parts.
Carbolic acid. 1 part.

This masks the odor of the iodoform completely, but the carbolic acid has the disadvantage of possessing an odor which to many is objectionable.

NO. II.

Iodoform 100 parts.
Oil of neroli 1 part.
Oil of lemon 2 parts.
Tinct. benzoin 2 parts.
Acetic acid 1 part.

*W. M. Ross.—Read before the Indiana Pharmaceutical Association, at Richmond, June 7 and 8, 1887.

Mix and place in a stoppered flask, and keep at a temperature of from 120° F. to 140° F. over a water bath, for two days.

This process completely covers the odor of iodoform, replacing it by one very agreeable, much resembling cologne. But this process requires considerable time for its completion, which lessens its pharmaceutical value.

NO. III.

Iodoform 15 parts.
Powdered charcoal 10 parts.
Camphor 5 parts.

This nearly masks the iodoform odor, that of the camphor replacing it.

NO. IV.

Iodoform 100 parts.
Powdered charcoal 3 parts.
Quinine sulph. 5 parts.

This is of little or no value. The quinine is useless, and the charcoal is in too small a quantity to be effectual.

NO. V.

Iodoform 1000 parts.
Oil of peppermint 10 parts.
Carbolic acid 5 parts.

This almost completely masks the iodoform odor, and that of the carbolic acid is rendered much more agreeable by the oil of peppermint.

NO. VI.

Tinct. of tonka beans.

This nearly covers the odor of the iodoform, producing a very agreeable one, slightly resembling that of bitter almonds.

NO. VII.

Iodoform 10 parts.
Powdered opium 1 part.

This almost completely disguises the odor of iodoform, and in many cases would not be an objectionable addition, but, of course, it cannot be used in prescriptions, unless indicated by the physician.

NO. VIII.

Oil of lavender.

This almost completely masks the iodoform odor by its own, which is very agreeable.

NO. IX.

Oil of sassafras.

Oil of bergamot.

This does very well, much better than the sassafras alone.

NO. X.

Thymol.

This entirely masks the iodoform odor by its own, which, in my estimation, is but little better.

NO. XI.

Iodoform ointment 1 troy ounce.

Dilute hydrocyanic acid 10 drops.

This was tried, and finding it did no perceptible good, I added more of the acid, but with little effect. The odor of the iodoform was still very plain.

NO. XII.

Oil of bitter almonds.

This covers the odor of iodoform by its own almost completely. Some object to the odor of bitter almonds, but, to say the least, it is a decided improvement over that of iodoform.

NO. XIII.

Oil of eucalyptus.

This completely masks the iodoform, but its own odor is far from agreeable.

NO. XIV.

Balsam of Peru.

This almost entirely covers the odor of iodoform, and is always at hand and convenient.

NO. XV.

Roasted coffee.

This masks the odor of iodoform most completely, only its own being perceptible, which is very agreeable. It does not interfere with the

medical action of the iodoform in the least, and is every way fitted for this use. I would highly recommend it for this purpose.

NO. XVI.

Chloral hydrate.

By this the odor of iodoform is masked to some extent, but, on being exposed a day or two, returns. The others were not effected perceptibly on being exposed for three days.

I have tabulated these different processes, arranging them on a scale of ten, so as to show, as near as possible, their comparative value, first, as regards the completeness with which they mask the odor of iodoform; second, as to their pharmaceutical value depending on the absence of any therapeutic action, no disagreeable odor, on their convenience, physical properties, etc. :

PHARMACEUTICAL VALUE.		COMPLETENESS.	
No. 15	10	No. 15	10
No. 5	9	No. 1	10
No. 8	9	No. 2	10
No. 14	9	No. 10	10
No. 8	8	No. 5	9
No. 7	8	No. 8	9
No. 9	8	No. 9	9
No. 12	8	No. 12	9
No. 1	7	No. 13	9
No. 13	7	No. 6	8
No. 2	6	No. 7	8
No. 6	6	No. 14	7
No. 10	6	No. 16	8
No. 16	5	No. 3	7
No. 4	3	No. 5	3
No. 11	1	No. 11	2

—*Technics.*

**THE NEW YORK STATE BOARD OF MEDICAL
EXAMINERS.**

SIR: A law of 1874 established for the State of New York a State Board of Medical Examiners. Frequent deaths and occasional resignations changed its original membership several times, until, upon the recommendation of the undersigned (who, therefore, objected repeat-

edly to his own appointment) and for reasons easily understood, all the members of the present Board, with one exception, were selected by the Honorable the Board of Regents of the University of the State of New York from amongst the medical men of Albany, the seat of the government and the Board of Regents.

The profession never expected the law as it was passed in 1874 to be efficient. It was believed by many that some of the medical colleges objected to the establishment of a State Board altogether, though others were known to favor it. It was certain that sectarian influences succeeded in undermining the passage of the original bill and emasculating it. *It is certain* that no State Board of Examiners will ever benefit either the profession or the public, both of which stand in equal need of it, before the license to practice medicine will depend on the *compulsory* passing of a successful examination before the State Board. As the law stood, nobody ever applied for examination and the degree of M. D. of the University of the State of New York, who was in the possession of a diploma from a college in good standing. Such few as volunteered to come forward, were men who had previously failed in their college examination, or "practised medicine" without study, knowledge, or any title whatsoever. There being no rules and regulations referring to a minimum of accomplishments or requirements, a few of these were let loose upon the unsuspecting public with a diploma; the majority, however, failed.

When the new Board was appointed in the beginning of this year, its members accepted their positions upon the condition that the Board of Regents would authorize a number of rules and principles which were to regulate the examinations and the granting of degrees. As they have been approved by the Regents, I am directed by the Board of Examiners to present them to you for your information, and, if you deem proper, for publication and comment. We know quite well that, as long as the examination by the State Board is not made *compulsory*, any number of rules and principles will prove their inadequacy and inefficacy again and again. But the present Board hopes that its earnest recognition of the rights and dignity of medical science, art and practice will be admitted by, and found acceptable to the profession, and that the latter, after a minimum of requirements for the admission into the ranks of the profession has been officially accepted by the Regents, will feel encouraged to continue its exertions.

in behalf of both the elevation of the standard of medical education and the protection of the public.

Not one of the recent applicants for a degree has proved successful. One of them had failed in his college examination a few weeks previously, and now threatens to swell the number of graduates of the "University" of a neighboring State.

Very respectfully,

A. JACOBI, M. D.

110 WEST 34th ST., NEW YORK, July 25, 1887.

Rules for Examination.

The members of the State Board of Medical Examiners accept their positions with this understanding :

A candidate for the degree of Doctor of Medicine to be given by the Board of Regents, either desires an additional degree after he has received his diploma from a chartered medical college, or he has no diploma from any chartered medical college, and desires or prefers one from the Board of Regents. The degree given by the Board of Regents is to be, or become, an honorable distinction. It must be the object of the law to protect the people and to ennoble the medical profession, and not to facilitate the entrance into it of persons unfit or unqualified. The profession does not require larger numbers, but does insist upon an elevated standard. Therefore, the examination must be strict, and must be conducted according to the following rules :

1st. The examinations before this Board shall be conducted in the English language exclusively.

2d. The candidate shall be allowed two and a-half hours for each examination. The examination shall be in writing. The candidate must not consult books, extracts, notes, or persons, and must not communicate with any one during the two and a-half hours allotted to him. To do so is to be considered a failure to pass.

3d. The examination in clinical medicine and in clinical surgery shall consist in the actual examination of patients by the candidate, and a discussion in regard to the diagnosis, prognosis, and treatment of the cases.

4th. The examination in chemistry shall include the actual testing of a specimen of urine, in regard to its reaction, specific gravity, and the presence or absence of albumen and sugar.

5th. Each Examiner shall have the privilege, if he so desire, of supplementing his written examination by an oral one, in the presence of two other members of the Examining Board.

6th. The scale of marks shall be from zero to ten; ten being perfection, and anything below six being a failure to pass the examination.

7th. The questions and answers with their marks shall remain in the possession of the Board of Regents, and shall be open to inspection.

8th. When the candidate shall have completed all his examinations, the Board of Examiners shall meet and hear the result of the examination in each branch. And within ten days thereafter, each member of the Board shall make a written report as to the merits and acquirements of the candidate; being guided in this report, not alone by the result of the examination in his particular branch, but also by the result of the examinations in the other branches. And each member of the Board shall send his report, together with the questions and their answers and their marks in his branch, to the Secretary of the Board of Examiners, to be by him transmitted to the Secretary of the Board of Regents.

And, furthermore, it is the opinion of the Board of Examiners, that in order to receive the degree of Doctor of Medicine, the candidate should successfully pass in every branch, or at least in every branch but one.

State Board of Medical Examiners.

President—Abraham Jacobi, M. D., Examiner in Pathology.

Vice-President—Albert Vanderveer, M. D., Examiner in Surgery, and Clinical Surgery.

Secretary—Henry Hun, M. D., Examiner in Clinical Medicine, and in Materia Medica and Therapeutics.

James P. Boyd, M. D., Examiner in Obstetrics.

Franklin Townsend, M. D., Examiner in Physiology.

Samuel R. Morrow, M. D., Examiner in Anatomy.

William Hailes, Jr., M. D., Examiner in Histology.

Willis G. Tucker, M. D., Examiner in Chemistry.

[As will be seen, nearly all the above are professors of the Albany Medical College. They are men committed to the policy of higher medical education. Instead of licensing unqualified men they doubtless will send many back to the colleges for further study. Let us hope that such a board as this will be given power to compel all persons to come before them for examination before they can practice.—ED.]

THE MICROBE OF CANCER.

Dr. Domingo Freire, who claims to have discovered the preventive inoculation of cholera, has recently attempted to demonstrate the microbic nature of cancer.

Freire examined the blood of a cancerous woman and discovered in it zooglea capable of cultivation in gelatin kept at a temperature of from 37° to 40° C., and developing into bacilli 0.011 m. in length by 0.002 in breadth, enlarged at one extremity and resembling the bacilli of typhoid fever. In the cultivation he observed also spores, zooglea and collections of small bacilli which appeared to be the various stages in the development of the bacilli. Without determining whether he had cultivated one or many varieties of bacteria, Freire concluded that he had found the specific microbe of cancer, and that this microbe passes through two stages in its evolution. The first is represented by the micrococci in zooglea and the second, more advanced, by the bacilli which are capable of living only outside of the blood, but are found in the cancerous juice which covers the ulcer. The writer does not mention the cultivation of these latter bacilli, and has apparently not determined whether or not they will produce bacilli like the former. To explain the cancerous cachexia he examined the urine of cancerous patients and discovered a ptomaine, which is very poisonous to birds, causing death with convulsions. But the recent experiments of Gautier and Bouchard show that even normal urine contains poisonous alkaloids, and the progressive development of the tumor in the organs essential to life would explain the cachexia. Freire then inoculated guinea pigs with the cultivation. He produced a slight wound and injected into it a solution containing the germs. At the end of a month one animal died and the autopsy revealed the presence of a tumor about the size of a hen's egg, located in the left iliac fossa below the fold of the peritoneum. The tumor was soft, and on pressure exuded a viscid substance of about the consistency of brain. This is the most characteristic of all the experiments reported by the author. Microscopic examination of this tumor, as well as of the others obtained, demonstrated that they were encephaloid carcinomata. There were agglomerations of giant cells, and there was no doubt in Freire's mind that the tissue was really cancerous and produced by the inoculation. The experimenter also succeeded in attenuating the cancerous virus by passing it through a number of

birds, and the animals that had been inoculated in this manner acquired immunity from the stronger preparations. The investigation demonstrated to a certain extent the nature of cancer, and indicates a method of treatment for this terrible affection, hitherto looked upon as incurable.

It will be interesting to refer here to the experiments of Galippe and Landouzy, who communicated their results to the *Sociedad de Biología*. These writers announce that they have discovered micro-organisms in fibroid tumors of the uterus and in ovarian cysts. The parasites are of three varieties, 1, sphero-bacteri in diplococci and in chains; 2, other micrococci, less common, smaller and forming cancer; 3, bacilli, isolated or united, forming threads. They succeeded in cultivating these microbes in warm gelatin, but did not make inoculation, and in consequence no conclusion as to their pathogenetic properties have been reached. These authors compare these tumors with those found at the roots of the teeth, studied by Malassez, and express the opinion that they are both due to the penetration of microbes from the neighboring cavities, the buccal and vaginal. Myomata of the uterus are more frequent than myomata of all other organs combined, and ovarian and radiculo-dental cysts are those most frequently developed. Here, then, is a new field opened up to bacteriologists. Galippe and Landouzy believe that many animal tumors are absolutely identical in their origin with many vegetable tumors known to be of parasitic origin. This is a legitimate deduction in general pathology, which will sooner or later be demonstrated. The idea of a *neoplastic diathesis*, advanced by Verneuil, is thus reduced to a question of soil and auto-inoculation.—*Revista Med., Quirurg. de Buenos Aires*.

IMMUNITY BY INJECTION OF CHEMICAL BODIES.

Dr. L. C. Wooldridge recently communicated to the Royal Society a method by which he had been able to protect rabbits from anthrax, which is of considerable interest in connection with the general question of the nature of protection in this and other diseases depending on micro-organisms. The method consists in cultivating the anthrax bacillus in an alkaline solution of a peculiar proteid body which can be obtained from the testis and thymus gland. The growth is not abundant, and, after two days at 37° C., it is removed

from the culture-fluid by filtration. A small quantity of filtered liquid is injected into the circulation of a rabbit, and the animal can then withstand the inoculation of extremely virulent anthrax blood. The bacillus itself grown in this peculiar culture-fluid has no protective influence; it either kills or it has no effect. The result is extremely curious, for hitherto protection against zymotic disease has been effected by the communication to the animal of a modified form of the disease against which protection is sought. In Dr. Wooldridge's experiments the protection must be produced by some chemical body, the product of the activity of the bacillus. The observation belongs to a new order of facts, and appears to fall in with M. Pasteur's theory as to the method in which immunity to hydrophobia is produced by inoculation of the spinal cord of rabid rabbits. Both find some support in Professor Cash's experiments with perchloride of mercury, in which it was shown that after animals had taken a sufficient quantity of the drug, they were no longer liable to anthrax.—*The British Medical Journal*, May 21, 1887.

THE TOPICAL TREATMENT OF TUBERCULAR PHTHISIS.

The researches of Koch and others demonstrate that bacilli are found in larger or smaller numbers in all forms of tuberculosis, and further, that some idea of the extent of the phthisical process may be determined from the number of bacilli. It was found that the bacilli are more abundant where there was recent caseous infiltration, and in the interior of cavities whose walls were undergoing rapid softening. When the walls of the cavities are firm and indurated, the bacilli are few in number, and they are fewest in the cicatricial contracting and pigmented lung-tissue. By examining the sputa of the phthisical patient, much light may be thrown on the condition of the lungs. We may surmise that the fewer the bacilli, the less the destruction, and *vice versa*. If we admit that bacilli are the cause of tuberculosis, bacillicides are naturally indicated. The experience of various physicians of the favorable results obtained from the use of bacillicides at any rate warrants their employment, even though they may not admit that the bacilli are the causation of the disease. Many bacillicides have been recommended; among them is corrosive sublimate, and this Dr. J. L. Porteous (*Edinburgh Medical Journal*, May, 1887,) in his experience has found to be the best.

Various modes have been suggested for applying the remedies; inhalation of the spray containing the bacillicide being the most effectual, as it gets directly to the part affected and retains the original strength of the solution.

The method which Dr. Porteous employs is to use a spray producer with a reservoir graduated to hold the exact quantity to be inhaled at one sitting. The patient is then directed to deeply inspire at the same time that the ball of the vaporizer is squeezed. By this means the vapor is drawn directly into the lungs and is in no way diluted before reaching the part affected. This process is repeated every four or six hours. Dr. Porteous reports three cases in which extremely favorable results followed this method of treatment.—*Therapeutic Gazette*.

PATHOGENY OF GASTRIC ULCER.

The precise pathogeny of chronic ulcer of the stomach is one of those undetermined questions which have led to considerable speculation, with comparatively little profit. The position, form and nature of the ulcer have done more than any positive demonstration of the vascular lesion to favor the current doctrine of its dependence on arterial blocking. But every one knows the difficulties in the acceptance of this view, not the least being the comparative frequency of the disease in the female sex, and the great preponderance of cases where the ulcer is solitary and seated on the posterior surface near the lesser curvature. Dr. Decker, of Würzburg, has the last word on the subject, (*Berl. Klin. Wochenschrift*, No. 21,) and he advances evidence in support of the initial lesion being traumatic, or rather thermal. Thus, he believes that the contact of hot thickened fluids with the gastric mucosa excites hyperæmia, which becomes localized, and may lead to venous stasis and hemorrhage in a limited territory, with all the subsequent necrotic changes. He supports his view not only by reference to the clinical history of cases of gastric ulcer, (he points to the great prevalence of gastric ulcer among cooks, who habitually test the flavor of their dishes when very hot,) but by two experiments on dogs into whose stomach food heated to 50° C was introduced. In one of the animals a patch of hyperæmia, with hemorrhage between the gastric mucosa and muscularis near the lower curvature, was found; in the other, a deep ulcer of characteristic shape and position had been produced.—*The Lancet*, May 28, 1887.

GASEOUS ENEMATA.

Dr. E. T. Bruen, of Philadelphia, read a paper before the Climatological Association, on the above subject, on the treatment of consumption:

Of the therapeutic measures under the control of the profession, diet, climate and suitable hygiene are of principal importance. It is possible by climatic and dietetic treatment to so change the nature of the tissues that they shall not be suitable culture media for the growth of the bacillus of tuberculosis. I wish, however, to refer more particularly to the use of the Bergeon method by the injection of sulphuretted hydrogen. To antagonize the specific cause of the disease, this method has been a failure so far as my experience goes. Since February last I have had under treatment sixty-one cases by this method. Systematic examinations of the sputa have been made by Dr. E. O. Shakespeare. There has been no apparent reduction in the number or change in the character of the bacillus. This method should be classed among the methods at our disposal for the treatment of this disease. The good effects in my hands have been reduction of temperature, reduction of expectoration, very often a complete suppression of bronchial catarrh, and relief of cough. This leads to improved digestion and enables the dietetic treatment to be carried out with great thoroughness. Forty-four of the cases showed improvement to a certain extent, the average gain in flesh being about five pounds. In one-half the cases the temperature has been brought to the normal, while the remainder, although the temperature has not been brought to the normal, it has been reduced two or three degrees. In fifteen cases the results have been negative, but in no case did any harm follow the use of this plan of treatment.

The improvement has been most marked where there is a considerable catarrhal element. Those cases in which there has been more or less thickening of the lung, with the general symptoms well marked, wasting, loss of flesh and weight without much rise of temperature, I have found not specially benefitted by the injection of gas. I have had the opportunity of making a *post mortem* in one case which had been subjected to this treatment. Although the cavities in the lungs were unusually clean, I did not observe any evidences of cicatrization. With reference to the strength of the solution, I have not found strong solutions at all satisfactory. The best results have

been obtained from a solution of 5 grains of sulphide of sodium with 5 grains of chloride of sodium in $1\frac{1}{2}$ pints of water. I have never found it desirable to administer more than $1\frac{1}{2}$ gallons of gas at one time. I insisted that the injection be made slowly and that one-half to three-quarters of an hour should be occupied. I have not derived as much satisfaction, in the treatment of the various forms of phthisis to which I have referred, from any method as I have from the injection of sulphuretted hydrogen. I have always tested the breath for the presence of sulphuretted hydrogen. I have had negative results in at least eight out of every ten cases.—*American Medical Journal*.

TROPHIC NERVES.

The actual demonstration of the existence of trophic nerve fibres, apart from vaso-motor fibres, has not until recently been made, although many evidences pointing to that conclusion have been put forward. Dr. Joseph, of Berlin, in a number of experiments on cats, produce facts which go to prove the existence of trophic nerve fibres in the peripheral nerves. The complication of vascular changes induced by the removal of the vaso-motor fibres from a part must be excluded in order to prove definitely that any nutritive changes occurring after section of its nerve are due to the loss of trophic influence. These conditions were carefully considered, and in order to avoid any vaso-motor changes, the second cervical nerve was selected for section, which, as will be seen, contains no vaso-motor fibres. This nerve was used in all the experiments. Mere section of the trunk of the nerve produced no effect, as reunion rapidly took place, so that it became necessary to remove a considerable portion of the trunk to prevent this occurrence. In some of the animals the ganglion on the posterior nerve-root was also removed. The changes induced were limited to the area of distribution of the nerve, and in those where the ganglion was removed similar changes occurred in the cutaneous area of distribution of the fifth cranial nerve of the corresponding side, coming on in different animals at a period varying from five to twenty-seven days. The changes consisted in loss of hair, at first localized, afterwards gradually extending, situated above and behind the ear where the trunk was only severed; above the eye and over the cheek, where part of the trunk and the ganglion on the posterior root were removed.

After a time complete baldness and a shiny atrophied state of the skin made their appearance. No increased vascularity, inflammation or any other change whatsoever could be discovered in the skin. The hair was examined for parasites, but none could be found. Microscopic examination of the skin failed to detect anything beyond atrophy of the hair follicles; there was no evidence of inflammatory or other changes. From these experiments, Dr. Joseph concludes that trophic nerve fibres exist apart from vaso-motor fibres, and entirely independent of them; and he explains the similar changes in the area of distribution of the fifth cranial nerve by assuming that it derives its trophic supply from the ganglion on the posterior root of the second cervical nerve from which fibres join the ascending root of the fifth.—*Virchow's Archiv*, Bd. cvii., Hft. 1.—*The Practitioner*, July, 1887.

THE LOCAL TREATMENT OF DISEASES OF THE RESPIRATORY ORGANS.

The methods of treatment which had been employed were the direct introduction of coarse sprays, the use of the Evans inhaler and the use of the pneumatic cabinet. In the treatment of phthisis the best results are attained in the early stages of the disease, or where the disease, although further advanced, is limited to a small portion of the lung. The use of sprays is beneficial only in so far as we desire to treat the co-existent bronchitis or cavities connected with bronchi of the second or third order. In incipient phthisis with very little bronchial catarrh, local treatment is probably of little service. These cases are best treated with compressed air. In a large proportion of the cases we may hope to render the disease latent. The expansion of the lung favors the expectoration of the contents of the smaller tubes and modifies the intra-thoracic circulation. The sittings should be frequent—every day or every second day. Ten minutes is usually sufficiently long for the patient to remain in the cabinet. The pressure should gradually be increased up to one-half or three-fourths of an inch. If used cautiously this is the best method for the local treatment of incipient phthisis. With the Evans inhaler his results had also been satisfactory.

In the treatment of advanced cases the first effort must be to cure or diminish the bronchitis. The pneumatic treatment then comes into

play. This gives better expansion, improves the circulation and alters the action of the trophic nerves. In all cases internal medication has been combined with the local treatment. The more acute the disease, the higher the fever and the more sudden the onset, the less can we expect to accomplish by treatment. In no case diagnosed as acute phthisis did treatment have the slightest effect.—*American Med. Journal.*

EXPERIMENTAL PERITONITIS.—Dr. B. Pernice publishes, in *La Revista Internazionali di Med., e. Chirurg.*, an account of his recent experiments instituted to determine the nature and causation of peritonitis. The following is a summary of his conclusions:

1. The injection even of very small quantities of nitric, chlorhydric, sulphuric, phenic and acetic acids, of corrosive sublimate and of nitrate of silver, into the abdominal cavity, are capable of producing peritonitis and even perforation.
 2. The peritonitis thus induced is usually of a sero-fibrinous variety, sometimes serous, but never purulent.
 3. Micrococci are constantly found in the peritoneal exudations. These are principally diplococci and may be easily cultivated in gelatin.
 4. These bacteria are possibly derived from the blood, since we have detected them in the blood of healthy animals. They also abound in the air where the animals are kept.
 5. Pure cultures of these diplococci are not capable of inducing peritonitis, either when injected in the blood, the peritoneal cavity, or in the cellular tissues.
-

NJIMO WOOD.—Njimo Wood is a new drug from Western Africa, derived from *Sarcocephalus Esculentus*, one of the *Cinchonaceæ*, which may possibly find a place in the materia medica. The natives use it in all cases of gastric troubles, loss of appetite, etc., and it furnishes, similarly to the Coca leaves of America, a pleasant stimulant much in request with the negroes.

Experiments made with an extract obtained from the wool, with a view to determining the amount of alkaloid, did not succeed; a resin and bitter principle only were isolated.—*Pacific Record*, April 15, 1887.

Editorial.

DOCTOR ROCHESTER'S SUCCESSOR.

It gives us great pleasure to announce that the Faculty of the Buffalo Medical College have elected Dr. Chas. G. Stockton to the Chair of Theory and Practice of Medicine and Clinical Medicine, vacated by the death of Dr. Rochester.

The alumni will see in this appointment an indication that the ruling spirits in the Buffalo Medical College are not altogether defiant to the demands which its true friends have made, and which culminated in the action of the Erie County Society at its last meeting. These demands, as repeatedly expressed in the JOURNAL, may be summarized as follows :

1st. That the college should cease to confer the degree of M. D. upon unqualified men.

2d. That, other things being equal, its own alumni should be selected to fill vacancies.

3d. That the professional talent of our own city should be recognized, and the importation of men, unless of exceptional ability, from other cities discountenanced.

In the appointment of Dr. Stockton, the last two of these requirements have been fulfilled. Dr. Stockton is a graduate of the Buffalo Medical College, and since his graduation has made Buffalo his home.

In 1882, he, together with other prominent men who despaired in any other way of effecting a reform in the loose methods then profitably followed by those who controlled the medical education of Western New York, effected the establishment of a medical department of Niagara University, and was by the trustees appointed to the Chair of Materia Medica and Therapeutics, which position he has held with honor to himself and the University to the present time.

That such a man, irrevocably committed to the cause of medical educational reform, should have been elected to the most important chair in the Buffalo Medical College, is a most gratifying indication that the days of easily-obtained diplomas are at

an end in Buffalo. Knowing the honesty of Dr. Stockton's convictions, we are confident that, without such assurances, he could not have been prevailed upon to accept the proffered chair.

The alumni of the old college will, therefore, rejoice with us in the hope that it will follow in the steps of Niagara University and take its place among the most reputable colleges in the land.

We extend, therefore, our most hearty congratulations upon this appointment to the Buffalo Medical College, and to the worthy alumni of the college, with the earnest hope that every successive vacancy may be as well and honorably filled.

CYNOPHOBIA.

An epidemic of disease hitherto undescribed in medical literature is now prevalent in Buffalo, raging with especial severity among the aldermen. The affection is characterized principally by a morbid fear of dogs, and hence we have denominated it *cynophobia*. We find absolutely nothing about the disease in writings of the ancients, though Virgil alludes to it in a vague manner when describing the evil effects of Sirius, the dogstar, upon mankind:

"Sirius ardor,
*Ille sitim morbosque ferens mortalibus aegris
Nascitur, et laevo contristat lumine coelum.*"

It will be observed that it is the men that are afflicted with "the thirst and diseases" when dogstar appears, and not the dogs. In the "History of the Epidemics of the Middle Ages," no allusion to any malady resembling cynophobia was found. We may therefore safely assume that it is essentially a modern disease as an epidemic, although it has always been epizootic with cats, foxes and some other varieties of game. Aristotle tells us that "Dogs are subject to rabies; it makes them mad; all animals that they bite also become mad, with the exception of man." As the ancients were not afraid of acquiring hydrophobia they were not afraid of dogs, and consequently could not have had cynophobia.

The causes of the disease are somewhat obscure. As the affection is most prevalent when the dogstar holds sway in the

heavens, we are tempted to seek an astronomical origin of the disease, and attribute it, as Virgil does other ills, to the malign influence of Sirius. The excessive use of alcoholic drinks in hot weather may also be mentioned as a cause; the fact that the aldermen are most seriously affected giving some color to this hypothesis. We are informed that some of our "City Fathers" are so troubled with alcoholic hallucinations that they can distinguish *in carne* dogs from the *in mente* variety only by striking at them with their canes. The *in carne* dog will bite while the *in mente* dog does not move. They accordingly fear all dogs.

Cynophobia is characterized by the following symptoms:

1. A delusion that dogs have hydrophobia, when it is a well-established fact that this symptom of rabies, fear of water, is never found in the canine species, only men and cats being thus affected.

2. A delusion that dogs are peculiarly liable to become rabid in hot weather, when there is no evidence that climate or temperature have anything to do with the development of the disease. Audry observed in 1780 that rabies was most prevalent in winter. The distinguished French veterinarian, Bouley, has tabulated 3,096 cases occurring in dogs, and finds them distributed through the seasons as follows:

	Winter.	Spring.	Summer.	Autumn.
Cases,	755	857	788	696
Per cent.,	24 $\frac{1}{4}$	27 $\frac{3}{4}$	25 $\frac{1}{2}$	22 $\frac{1}{2}$

The cases are quite evenly distributed throughout the year. The slight excess occurring in the spring is not due to any meteorological conditions.

"In the spring the young man's fancy
Lightly turns to thoughts of love."

It is the same with the dogs, and as female society is somewhat limited among them, their rivalry is so much the greater, their jealousies more bitter, and their fights more frequent. If any quarrelsome lover happens to be infected with the microbe of Pasteur, he will communicate it to more of his associates than he would at other seasons of the year. If it were possible for

him to have mucous syphilides in his mouth, this affection would likewise be most prevalent in the spring.

3. A delusion that rabies will develop spontaneously in hot weather. This hypothesis has long been exploded. Dupuytren, Majendie, Breschet and others have cruelly destroyed dogs by starvation and exposure to the broiling sun, and yet no symptoms resembling rabies were developed. It has been demonstrated that the disease is propagated by inoculation only. People affected with cynophobia believe that all dog-bites are followed by the development of hydrophobia unless active preventive measures are adopted. When a dog has rubbed his tooth against them, they hasten to the nearest doctor who gratifies their whim by burning off an inch or so of skin with caustic, when they depart with sore legs and contented hearts. If, however, they are rich in this world's goods (common sense excepted), they take a pleasant journey to Paris to be treated by Monsieur Pasteur, where they run great risk of acquiring the very disease they so much dread.

4. Lastly, cynophobia is characterized by a delusion that epidemics of hydrophobia may be effectually averted by employing dog-catchers to entrap a few stray curs in a city, and imprisoning them in a dog pound. Our city is now spending \$150 a month for this purpose, owing to the epidemic of cynophobia, which has attacked the Common Council. Two dog-catchers and a pound-keeper are employed at a salary of \$50 per month each. (District physician receives the munificent salary of \$33 per month.)

No fatal cases of cynophobia have yet been reported, and as a consequence the pathology of the disease is still a mystery. The pound-keeper, however, was so severely affected that he imbibed large quantities of *spiritus frumenti* as a prophylactic measure against rabies, and it was found necessary to commit him to the penitentiary for thirty days in order that the disease might not have a fatal issue.

Any further developments regarding this new epidemic will be furnished our readers.

SUCCESSOR TO DR. STOCKTON.

At a recent meeting of the Faculty of the Medical Department of Niagara University, the vacancy in the Chair of Materia Medica and Therapeutics was filled by the promotion of Dr. F. R. Campbell, who for several years has held the important position as lecturer on hygiene in the college. During his connection with the college, he is said to have been most faithful in the discharge of his duty. His lectures have been characterized by a clearness and exactness rarely seen. The public estimation of Dr. Campbell is very high, as he has a reputation fairly won, without having resorted to spread-eagle advertisements, which the public, as well as the profession, so despise. The light in which he is regarded by the public is best shown by the following extracts from the Buffalo *Courier*:

The Chair of Materia Medica and Therapeutics was recently made vacant in the Medical Department of the Niagara University by the resignation of Dr. Charles G. Stockton, who has heretofore occupied the position with credit to himself and the school. After considering the names of several gentlemen of ability and experience, it has been decided to tender the position to Dr. F. R. Campbell, who has at times acted as assistant, as well as occupied the position of lecturer on hygiene in the school. It is believed that the doctor is in every way worthy of the honorable and important position to which he has been promoted, as he is a gentleman of excellent literary attainments, being a graduate in arts from Rochester University, and has had ample experience, derived from a large and rapidly-increasing medical practice. His professional standing in the community is high, and by his medical contributions, many of which have been of a very superior character and have found place in foreign journals, and by his translations of important articles from the French and Italian, with which languages he is familiar, he has won an extended reputation as a scholar and writer. As a teacher he has excelled, not so much in oratory, but by the clearness and succinctness with which he has presented subjects. Indeed, Dr. Campbell seems to be one of the rising medical men of Buffalo, and he will, without doubt, distinguish himself in the profession and in the school with which he has been identified as a lecturer from its organization, by his energy and scholarship. The appointment will commend itself to the medical profession and to the friends of the school.

NIAGARA UNIVERSITY'S APPOINTMENT.

A meeting of the faculty of the medical department of Niagara University was held yesterday to fill the existing vacancy in the professorship of materia medica, which was caused by the resignation of Dr. Stockton, who accepted the head of the Buffalo University's faculty. The unanimous vote was given to Dr. Fred R. Campbell of this city, who is now a lecturer in the college on the subject of hygiene.

During the last few years he has attracted the attention of the profession in this city, and in fact of the surrounding country, by his articles in the *BUFFALO MEDICAL AND SURGICAL JOURNAL*, of which he is an associate editor. A recent number of the *JOURNAL* contains an article on the prevention of diarrhoeal diseases in children, which is said to have been universally recommended by experts on these subjects. On this account, and because of his broad and liberal education, he was doubtless chosen. He is a native of this State, and was educated at the Lockport High School, and afterwards at the Rochester University, where he graduated with honor. His medical education was obtained in this city and the medical department of the University of New York. For some months he was clinical assistant at the Rochester Insane Asylum. His work as a sanitarian in this city has been thorough, and as a health inspector he has rendered great service to the city. This selection has been made after careful consideration of the qualities of many physicians who could have accepted the position. The doctor has as large a practice as any young physician in the city, and is greatly esteemed by his patients. It is felt that he will fill his new position with credit to himself and to the college. His nomination will be forwarded to the trustees at once.—*From Buffalo Express.*

As will be seen by these extracts, the Doctor has unexceptional educational advantages; has had a large practice since graduation, and is believed to be in every way qualified to fill this exalted position. This belief we share to the fullest extent, and congratulate the faculty of Niagara University on its admirable selection. The nomination will be sent to the Trustees at once for appointment. The course of lectures will begin with the term, September 21, 1887.

PROVIDENCE ASYLUM FOR THE INSANE AND INEBRIATE.

As will be seen by reference to the advertisement on another page, the Providence Asylum has been entirely refitted and the staff so reorganized as to meet the demands upon it. The institution is able now to treat any and all cases of insanity and inebriety. The wards are small and thus a great number of patients are not brought in contact with each other, yet they are large enough to afford every comfort to the patients. The rooms and buildings are thoroughly heated by steam, making it most comfortable in winter. The location of the building on the highest point of land in Buffalo, and situated in the middle of a large tract of land, makes it delightfully cool in summer.

Every hall in the house is under charge of a Sister of Charity, who has had years of experience in the care of this class of cases, and whose devotion to the sick is proverbial. It has a medical staff consisting of men who have had experience in this class of cases.

The medical supervision, which for many years was conducted by the late Dr. Ring, has fallen naturally to Dr. Crego, who attended with him for a year, and who has had several years' experience in the Buffalo State Asylum. He is ably seconded by Dr. Wm. G. Ring, who assisted more or less for three years in the asylum. They are assisted by two young men, Dr. Lewis and Dr. Congdon, who have had liberal educations in medicine, and studied nervous and mental diseases under the instruction of Dr. Crego in the Medical Department of Niagara University. The public have already taken a deeper interest in the institution, as shown by the increased number of admissions during last year. The Sisters, as well as their friends and patients, are rejoiced at the great number of recoveries during the last year. The home life, freedom from curious visitors, the quiet of the place, and its strictly private character, are the advantages claimed for the institution. The staff is as follows:

Thomas Lothrop, M. D., Edward C. W. O'Brien, M. D., Conrad Diehl, M. D., consulting physicians; Floyd S. Crego, M. D., 141 Delaware avenue, senior attending physician, and chief of staff; William G. Ring, M. D., 364 Niagara street, junior attending physician; George W. T. Lewis, M. D., senior assistant, Linwood avenue and Main street; Charles G. Congdon, M. D., junior assistant, 1046 Jefferson street.

Why is it that operations about the throat seem to lead the professional mind to a desire for newspaper notoriety? It is because the windpipe supplies a connection to the idea of "blowing one's own horn?" However it may be explained, events would seem to indicate some such conclusion. Some time ago we had successive reports of one operation on a man's larynx, and the public were duly impressed with the extraordinary nature

of the operation and the superlative skill of the operator. A few days ago, under the astounding title of "A Modern Lazarus," we find a column of a newspaper devoted to a graphic and detailed account of a laryngotomy, under circumstances which made the operation creditable to the surgeon it is true, but reported in a way which has justly met with reproof and condemnation by the regular profession.

Book Reviews.

The Vest Pocket Anatomist (*founded upon Gray.*) By C. HENRI LEONARD, A. M., M. D., Professor of the Medical and Surgical Diseases of Women in the Detroit College of Medicine. Thirteenth revised edition, enlarged by Sections on Anatomical Triangles and Spaces, Herniæ, Gynæcological Anatomy and Dissection Hints. Detroit: The Illustrated Medical Journal Co., 1887, cloth, 86 illustrations, 154 pages, post-paid, 75 cents.

This little volume in its former editions is so well-known that it is only necessary to confine our notice to this, the *thirteenth* edition, which contains very clear and accurate topographical plates of the Venous, Arterial and Nervous Systems, photo-engraved from the English cuts in Gray's Anatomy. This makes the work especially of value to accompany the surgical case of any practitioner that is doing much work in this line, who may wish at his hand a "regional reminder" of the placement of arteries and veins that he may wish to avoid in making his incisions. For this special purpose this little book, since it has the addition of these eighty-six engravings, is of a good deal of value to the country practitioner who sometimes does not have the time to return to his office to consult his more pretentious volumes. The "Dissection Hints" show the incisions to be made in post-mortems to advantage.

Drug Eruptions. A Clinical Study of the Irritant Effects of Drugs upon the Skin. BY PRINCE A. MORROW, A. M., M. D., Clinical Professor of Venereal Diseases. New York: Wm. Wood & Co. 1887.

The abnormal phases of drug action are comparatively an unexplored field, and this work does much to make the special knowledge upon the subject accessible to the profession. The changes in the skin caused by drugs are sometimes strikingly similar to the outbreak of the eruptive fevers and other idiopathic affections of the skin, and the subject is, therefore, of practical interest to every physician.



VOL. XXVIII.

SEPTEMBER, 1887.

No. 2.

Original Communications.

*PELVIC CELLULITIS.**

By WALTER D. GREENE, M. D.

Nearly every woman who has borne children, or has experienced the parturient process in any of its stages, has suffered, more or less, from pelvic cellulitis, and from the fact of its frequency in its various degrees of severity, makes it especially of interest to the obstetrician and gynecologist. Its history is somewhat peculiar, having been discovered and forgotten three times in past centuries, until the researches of Churchill and others, in 1843 and '44, again brought it to light. Pelvic cellulitis consists of an inflammation of the loose cellular tissue surrounding the uterus and extending between the layers of serous membrane, constituting the broad ligaments. As this tissue is very plentiful in the cavity of the pelvis, when the seeds of inflammation are sown, they quickly spread and usually involve the whole uterine cavity. This tissue exists everywhere in the pelvis around the pelvic organs, except between the peritoneum and uterus, where so little, if any, exists, that its presence has been denied by some observers. Different writers have given the disease the following names: parametritis, periuterine, phlegmon-inflammation of broad ligaments, pelvic abscess and pelvic cellulitis, the

* Read before the Buffalo Obstetrical Society, May 24, 1887.

latter by Sir James Simpson. The majority of the British medical men considered the latter name as applicable to any inflammation of cellular tissue within the pelvis, which would include psoas and iliac abscesses. Because of the indefiniteness, Dr. Thomas prefers periuterine rather than pelvic cellulitis. We are to understand, therefore, by these several appellations an inflammation of the adipose and areolar tissues, connecting the peritoneum with the floor of the pelvis, or the rectum bladder and uterus. Although every case of pelvic cellulitis is not traumatic in origin, it is nevertheless a fact that many of them are based on an infection from traumatic causes. In laceration of the cervix during labor the wound is liable to extend to the cellular tissue. How often do we find cicatricial tissue as a result of cellulitis, and the os uteri drawn around sometimes nearly to a right angle to the vaginal canal? Also minor operations upon or near cervix, and the treatment of the os with tents are liable to give rise to this disease. Pessaries form another prolific cause, and especially the stem variety. When they are ill-fitting and are left in situ for any length of time, cellulitis is liable to ensue with general peritonitis as well. The introduction of a sound up to the fundus of the uterus and endeavors to restore displacements of that organ are to be numbered with the causes, but according to statistics parturition at term and abortion cause one-half to two-thirds of the cases. It is certainly comparatively rare, except after the parturient process; where a predisposition exists, cold, fatigue, overwork, menstruation, etc., will develop it as immediate and exciting causes only. That it is not an idiopathic affection seems to be pretty generally conceded, although in nullipara, young and old, suppurating pelvic exudations of obscure origin are occasionally seen. When abscesses do occur, they are more often to be found in the broad ligaments than elsewhere—including ovaries and Fallopian tubes. In post mortem examinations these parts are often found in a state of suppuration, the tubes filled with pus or sero-purulent material. In a report of fourteen post mortem cases, in twelve the abscesses were found in the broad ligaments. Uncomplicated

pelvic cellulitis generally runs a course of from two to four weeks, and ends in resolution or suppuration, only more often in the former. Should it become complicated with peritonitis, endometritis, ovaritis, etc., it may become chronic, or suppurate and discharge pus for years after having dissected its way out by long sinuous routes. The points of exit of the pus may be through the abdominal walls, the bladder, rectum, vagina, urethra or uterus, the floor of the pelvis, pelvic foramina, sacro-sciatic notch, or through to pelvic roof into the peritoneal cavity. It comparatively seldom opens directly into the vagina, but burrows beside that canal and reaches the labia majora. I have seen one case of this kind into which I passed a sound four and one-half inches. In thirty-seven cases treated by Dr. McClintock, which suppurated, twenty discharged in the iliac region, two above the pubes, one in vaginal region, one beside the anus, six per vagina, five per anus, and two into the bladder. In acute cases, and especially those following parturition, the most prominent symptoms are first a chill followed by fever, the thermometer under the tongue frequently registering 104° , with fast pulse, pain, although not usually severe, difficult and painful micturition and often slight discharge of blood from the uterus. Vaginal examination at this time will reveal a hot surface with a tendency to dryness, with absence of tumor or hardness. As the disease advances, however, infiltration can be discovered and generally laterally to the uterus. More or less circumscribed tumors form, and as time goes on they gradually merge into each other, until the uterus seems imbedded in a hard tumor and becomes fixed. Often the limb on the side most affected is drawn up, but this is not a constant symptom. The bowels are generally constipated and vomiting is often present; headache, very rare. The symptoms of pelvic cellulitis of long standing are sometimes exceedingly slight, large tumors surrounding the uterus in women who do not consider themselves seriously sick. These are cases which develop very slowly without fever and very little pain; who have dragging pains in the thighs and back, consequent upon the pressing of the tumor upon the pelvic nerves. These

are patients who say they simply endure life, but do not enjoy it. They are troubled with difficult defecation, and have pain during coition; capricious appetite and shortness of breath, constipation and sleeplessness. Almost all of these cases refer the origin of their trouble to parturition, and they are generally correct. During the parturient act possibly some slight tear of the os or upper vagina may have occurred, which developed a slow traumatic cellulitis, although it must be confessed that most cases developing cellulitis after parturition are of an acute instead of a chronic nature. Those women who are sterile generally have cellulitis in a chronic form, and usually remain so even after restoration to health, if the cellulitis has been of long standing. On the other hand, when the disease is of an acute nature and ends in either resolution or abscess in two or three weeks, the power of conception is not lost. In chronic forms, the woman suffers for years, until some slight cold during menstruation or over-exertion, or other cause lights up the disease anew, an abscess forms and a physician is consulted. It is not always at an end with the formation of pus, as it may form and discharge again and again.

Fritsch mentions one case coming under his observation which continued to discharge pus in varying quantities for eight years. Of course, these cases are almost hopeless ones as far as radical cure is concerned, especially in the poor, who have neither time nor money to spend in the attempt to gain health as long as they are able to be about the house and attend to household affairs. What, then, would lead us to suspect this disease in the chronic form, which is the most difficult to diagnose? To partially recapitulate, the usual history is this: the patient has been confined within the last two to six months, but had not since that time regained her former health, often referring the circumstance to her nursing a child, when that takes place; is feeble, has poor appetite, nervous and gloomy, with a tendency to look at life on its dark side, an uneasy feeling and dragging sensation about the pelvis, with difficult defecation and possibly painful micturition. A digital examination will reveal a hardness and induration on

both sides of the uterus, and generally in the cul-de-sac of Douglass as well, judging from my own experience, although most authors deny its presence in that locality in the majority of cases. It is sometimes found between the bladder and the uterus. If the examination is made with the 'disengaged hand pressing over the hypogastrium, the uterus will be found fixed and immovable by the deposition and adhesiveness of lymph. It may be confounded with pelvic peritonitis, hematocele and fibrous tumors. Like all other diseases which afflict humanity, absolute rest is one of the requisite factors in treatment, and especially so in this case. In the first stage, cooling drinks, with an aperient if there is constipation, should be resorted to, with opiates to control pain, which usually is not great. Poultices applied to the abdomen are indicated and are very grateful to the patient. Aconite or veratrum viride may be given, and during the height of the fever I have used antipyrin with apparent comfort to the patient and with the result of lowering the temperature. Blisters applied to the hypogastrium are highly beneficial, and recommended by the best authorities, when the acute stage has passed. I have also used suppositories of iodoform with satisfactory results, one to be placed in the vagina every eight hours. Iodide of potassium may also be given, or corrosive sublimate for the alterative effect when the disease merges into the chronic form. The hot water vaginal douche every few hours gives relief and tends to quiet inflammatory action. Should abscesses occur, free opening should be recommended when they can be reached, and the sac washed out with equal parts of tincture of iodine and water, as recommended by Barbour. I have only to report two cases coming under my own observation, and I have finished. Mrs. S., aged 26; mother of one child; had not menstruated for two months, when, on July 29, 1886, she aborted, followed in three or four days by pelvic pains, high fever and frequent pulse, great pain during micturition and defecation. She was seen by three different physicians up to September 1st, when she came into my hands. The first day I saw her she had a temperature of $102\frac{2}{3}$, pulse 120, marked

tympanitis, with a well-marked fluctuating abdominal tumor reaching to the umbilicus, which, previous to her coming under my care, had caused a diagnosis of pregnancy to be given. Digital examination revealed an induration of the entire pelvic contents, with a fixed uterus. Profuse sweating and chills led me to suspect pus formation, and I asked Dr. Thomas Lothrop to see the case with me. He did not believe her pregnant, but confirmed my diagnosis of pelvic cellulitis, and also thought there was present some pelvic peritonitis as well. The patient was now in an extremely critical condition, pulse ranging from 120 to 130. On September 13th, when I visited her I was told she had had a large movement from the bowels, containing pus and blood, but it had been thrown away. There was an amelioration of all the symptoms and a marked diminution in the size of the abdominal tumor. I directed should another such movement from the bowels occur that it be kept for my inspection, but through carelessness that also was disposed of. The abdominal tumor grew gradually smaller until it disappeared entirely, the active symptoms abated, the tympanitis subsided and the woman went on to a good recovery, although the uterus still has a fixed appearance. She has menstruated regularly since that time. April 5, 1887, called to Mrs. H., aged 27, mother of three children; found her aborting; used corrosive sublimate solution whenever necessary to make a vaginal examination. Three days after she was seized with chill followed by fever and delirium of rather a wild type. The pulse for several days was 130 per minute and temperature 104° F., with a constant bloody uterine discharge. Moderate tympanitis was also present. Excessive sweating and headache, coupled with delirium and diarrhoea, led me to believe her to be suffering from blood poisoning; washed out vagina with bichloride solution twice a day. I regarded death as imminent for three or four days, when she seemed to take a turn for the better. In a few days the right shoulder commenced swelling; was red and painful. The uterus was fixed with quite a tumor in Douglass' cul-de-sac. Dr. Thomas Lothrop also saw this case with me, and recommended blisters

over the hypogastrium, hot water baths per vagina, and bichloride of mercury internally. The shoulder swelling went on to suppuration, was incised, discharged freely and is now healing slowly while another is forming over the tibia on the right leg. The uterus remains fixed in an indurated mass. Very little fever now and no pain except from abscess.

** TREATMENT OF BURNS—LESSONS FROM THE
"RICHMOND" FIRE.*

By GEORGE E. FELL, M. D., F. R. M. S.,
Professor of Physiology and Microscopy, Niagara University.

To many physicians the experiences produced through a disaster so terrible as the burning of a hotel full of valuable lives may never come. No one, however, can feel assured that it will not be his duty to render aid in such an emergency; hence all should be prepared for such service. In connection with the duties of the surgeon, I have divided my remarks into the following heads:

- 1st.—The immediate duty to the suffering patients, temporary dressings and relief of pain.
- 2d.—The removal of the injured to hospitals or homes.
- 3d.—Dressings of wounds of a more permanent character.
- 4th.—Subsequent treatment with a consideration of shock.
- 5th.—Prognosis in burns.

Under the head of immediate duty to the patient.—At one of the hospitals on the morning after the fire, I found several of the sufferers with their wounds dressed with ordinary cotton, apparently placed dry upon the wounds. The exuded serum had caused it to adhere closely, so that in the attempt at removal difficulty was experienced and severe pain produced before the permanent dressing could be applied. Had the parts or the cotton been saturated with oil, it would have been much better. Drug stores were in close proximity to the scene of the disaster, from which such material might have been procured. Sur-

* Read before the Buffalo Medical Union, May, 1887.

geon's lint, which may be torn in strips or used in large pieces, may be saturated with the oil and lightly bandaged on the wound. Better than the dry cotton application would be a simple bandage saturated with oil.

Relief of pain.—Morphia and atropia, hypodermically, it appears to me most generally indicated, one-eighth to one-half grain, according to extent of the injuries.

Regarding temporary dressings, sweet or linseed oil is mentioned as being easily procured.

The removal of the injured to hospitals and homes.—Here the duty of the physician comes in with weighty responsibility. The condition of the patient, however serious, generally requires the prompt removal to the hospital or home. As the ambulances are seldom made to carry more than two patients, and often but one comfortably, we have a difficulty meeting us at the threshold of this inquiry. Then, again, when large numbers are to be quickly transported, as in the case of the late disaster, and the emergency hospitals are full, the distance of the large hospitals,—the General and Sisters'—so far as Buffalo is concerned, gives another objection to the transportation by small ambulance. Had several of Mr. C. W. Miller's large covered wagons or large express wagons been called into the service, much better and quicker work might have been done. The placing of straw and mattresses in these wagons, with the use of a good number of stretchers, would make them fully as serviceable as the ordinary ambulance. A little forethought, or the establishment of an *emergency* ambulance system in different cities, would prevent the packing of suffering human beings into two or three small ambulances, as was noted at the Richmond fire.

In a disaster like the Richmond, the question arises as to the best time to send patients to their homes in the city or at a distance sometimes of hundreds of miles.

It would be well if all patients living in the city or town where the disaster occurs, after having their wounds dressed, could be immediately taken with care to their homes. This rule would be applicable to those going to hospitals in the city for the

following reasons: The effect of shock in burns is frequently not seen in from one to twenty-four hours to forty-eight hours, or even later; during this time patients can be moved with the least danger. However, when a long journey is to be undertaken, it appears that the effect of shock should be determined first, and after that, if the journey must be undertaken, let it be done with the greatest precautions, with the patient under the immediate care of a physician. There are several instances recalled from the Richmond disaster where patients seriously injured and removed to their homes at a distance had great difficulty in recovery. It is reasonable to think that a long railway journey would at the very least be injurious to the patient under such conditions.

Dressing of wounds of a more permanent character.—In a paper read by Dr. Lynde at the last meeting of this society, we found that they were almost as numerous as the nostrums for the cure of rheumatism. We trust that generally they may be more serviceable. In the talk of the laity there are mentioned many wonderful effective cures for burns, as "Dally's" salve, "Chapsega" oil, etc., etc. In examining their merits we find it exists in the properties they have of preventing access of air to the wound.

While it may be in the eyes of the medical profession a prevalent impression that nature does all in the process of repair of tissues, it is undoubtedly true that certain agents, through their effectiveness in producing a covering or condition simulating the natural, may, therefore, enable the process of repair to be more expeditiously carried on. I will briefly refer to the dressings used in the cases about which this paper centers, not because they may have any special virtues that other dressings have not, but rather that time will not permit another course.

The first dressing used on one of my patients was the Carron oil without any addition. This was obtained at the druggist's, and with saturated surgeon's lint was applied to his hands. Afterwards non-absorbing cotton was used for several times with the oil, and sufficiently long to demonstrate its utter worthlessness for this purpose. A dressing which becomes attached to the tissue is, in my opinion, objectionable.

Among the other dressings used may be mentioned collodium, which is only applicable to small surfaces, and never should be applied to large ones; oxide of zinc and Carron oil, objectionable both on account of its appearance and difficulty of removal; iodoform powder and lanolin, or vaselin, and iodoform powder and boracic acid, the latter objectionable through the production of pain; iodoform powder and starch in various proportions and Carron oil, and naphthaline. Of the dressings, I will say that cotton was early discarded even as an outside dressing. Finally, the dressing which gave the greatest satisfaction was that made of about equal parts of iodoform powder and corn starch with Carron oil, and used as follows: The dry powder was dusted upon the wounded surfaces with a duster—a “baby’s puff ball,” those used in the nursery being found to be the best. With this all portions of the wound could be thoroughly sprinkled. The Carron oil was then poured over the powder to cover all parts of the wounds; on this a common roller bandage, thoroughly saturated with the oil, was carefully but loosely wound, and the whole covered with layers of oiled silk, sufficient to prevent the escape of the oil.

A dressing of mutton tallow and a zinc oxyde was used, in which the fibres are removed from the tallow, which is afterwards kneaded in a mortar until soft and pliable; it is then cut into strips and applied to the wound and secured with bandages. This dressing was not found as convenient as the one previously mentioned.

The carbolized cosmoline dressing recommended and used in the University of Pennsylvania was not tried simply because the iodoform starch Carron oil mixture was found quite satisfactory.

When the Carron oil alone was used, within a short time the odor of putrefaction would make its appearance; when the iodoform was added to it as described, this unpleasant effect was prevented. The dressing had to be changed less frequently, and the surgeon had the satisfaction of knowing he was placing the wound under the best influence, not only so far as a soothing application affects the case, but to the believer in septic infection

he had provided an additional safeguard in the repair of the wound.

Right here I may say I cannot see any more favorable condition under which a burn can be placed than that presented by this combination. We have the air excluded, a dressing that can be easily removed, and an antiseptic influence as good as any, and without many of the objections which others offer.

Naphthaline is a dressing which was recommended by the consultants in the case of some patients under my observation. Regarding its value, I find it highly commended.

Naphthaline.—It is said to be insoluble in water and the animal juices. In wounds it is to be used as a dry powder dressing, being dusted, in fine powder, on the surface of the wound or packed in quantities without limit into wound cavities. Pilcher also states that its antiseptic qualities are inferior to carbolic acid or iodoform, yet in addition to the general advantages that no general toxic effect ever follows its use, its freedom from toxic qualities commends it as a substitute for iodoform, etc.

It is also stated that a pure article of naphthaline only should be used; that an impure article is likely to cause pain and irritation of the wound, and that no such effects attend the use of pure naphthaline. I used Merk's preparation in the cases under my care.

According to this article, a better article than naphthaline could not possibly be used for a wounded surface. The use of it demonstrated to my satisfaction that it is not a fit substance to be used generally for burns as compared with iodoform and the Carron oil dressing. In the case of Mr. M., pain was experienced, as also in the case of Mrs. M., so that the dressings had to be changed with the happy result of relief when the iodoform and Carron oil was reapplied. As to the odor of the Carron oil and iodoform, I will only say that when the olfactory bulbs of a surgeon becomes so seriously affected that he cannot stand this slightly unpleasant odor for the benefit of his patient, who usually, if seriously injured, does not object to it, he had better take up the occupation of a horticulturist as more properly within his (nasal) sphere.

Subsequent treatment with a consideration of shock.—Shock in burns is the most serious factor. The extent of surface burned is infrequently an index of the extent of shock. The mental conditions associated with the disaster, the age and condition of the patient, must on this account be important factors in the production of this remarkable condition of the system. As the various functions of the body are intimately associated with the nerve centres and controlled through the efferent influences originated in or through these centres in the brain, it is quite probable that the condition termed shock is principally the effect of a disturbance of the centres of various functions in the brain.

The influence of a nerve centre on the functions of many portions of the body is indicated in the simple experiment of performing artificial respiration upon the lower animals. When the oxygen is withheld from the circulation, we have the attempts at respiration produced by the want of oxygen in the blood circulating in the medulla; the renewal of this want reproduces a condition simulating the normal, and further respiratory efforts are not made.

When we consider the great number of centres of important physiological functions in the medulla alone, we may judge in a manner of the general effect of disturbing the normal condition of these centres by marked afferent influence. When the pneumogastrics are cut in the neck and central end stimulated, the hepatic functions are brought into action, it is supposed, through the sympathetic system, including its action in affecting the vasa motor system. In case of shock we have not only a decided interference with the centres of the brain interfering with the functional reflexes, but also have through the same influence a disarrangement of the vessels and organs of the system.

Moullin defines shock as "an example of reflex paralysis, in the strictest and narrowest sense of the term—a reflex inhibition, probably in the majority of cases generally affecting all of the nervous system," and not limited to the heart and vessels only. This undoubtedly is true, as we find produced through shock not only serious affection of the intestinal tract, but marked

interference with the functions of the kidneys and liver, and other organs.

The effects of shock, usually at the best, passes away gradually. That the results in many cases is wonderfully modified by treatment was evidenced in the case of a Mrs. M., one of my patients. In the case of her husband, who was also injured, it was weeks after the fire before it could be said he was out of danger from shock ; the degree of injury to the intestinal tract in this case being much less than in his wife's, but still evidently the result of the sadly peculiar conditions surrounding him, in the death of a wife and daughter, after a terrible physical and mental strain to which he had been subjected.

Case of a lady sufferer under my charge: I was called to attend Mrs. M., Sunday afternoon, March 20th, and was given immediate control of the patient by her father, a physician also ; the case was to be carried along in consultation with other physicians interested in the case.

When first examined, the patient had a pulse of 150°, weak and threadlike; in fact, a pulse indicative of the most serious condition. On dressing the burns I found them more extensive than I expected. Both arms to the shoulders were badly burned, the fingers of the right hand, having been protected by a muff, were uninjured ; both breasts had bad burns upon them ; the neck was badly burned in front ; the face, from the eyes to the throat, and on the upper portion of the back, existed two badly burned surfaces. Upon the arms in several places burns of the third degree were found near the elbows ; with these exceptions the burns would be classed as of the second degree.

In the case of her husband, Mr. M., burns were found mostly of the second degree upon the hands and face, or including the entire surface of face and hands ; on some portions of the hands the dermis was nearly burned away. Regarding the dear little girl, their daughter, whose life was sacrificed, I will say nothing further than that she was terribly burned, notwithstanding the reports to the contrary.

The therapeutical measures resorted to in these cases con-

sisted of stimulants, heart tonics, combined with assimilable food and nourishing enemata. In addition, at my suggestion, the inhalation of pure oxygen was used, and with encouraging results. As a stimulant to the nerve centres, and from a physiological point of view, it was indicated. An agent used, but not frequently, is glonoin (nitro-glycerine); its efficacy in heart failure has been lauded by a Chicago physician. The ordinary dose is one drop of a one per cent. solution. In the case of Mrs. M., as a dernier resort gtt. i. of a two per cent. solution was used every three or four hours, as indicated. I can speak of this agent in the highest terms. It was used after all other forms of support appeared to fail, and the results were noted usually within a short time of administration. The results in the case of Mrs. M. seem to indicate the value of the means adapted, as from a weak and compressible pulse of 150 Sunday P. M., it was gradually reduced to 140, 135, 120, and on the Wednesday morning following to 108, with the respirations keeping pace. Owing to giving out of the stomach and lower bowels, so that nourishment could not be retained, with albuminuria setting in, the result could only go on to a fatal termination.

The case of Mr. M. presented some features of special interest in the long-continued depression of the system, which called for the most careful treatment. For the first four days the pulse was 120. It run up to 126 at one time; was gradually brought to 114 and 110, where it remained without much variation for another week or two, then down to 108. Stimulants, with ammonia and heart tonics, and most careful handling of the stomach, brought this case through successfully.

Pronogsis in burns.—If any disaster evidenced the importance of conservatism in the pronogsis in burns, this of the Richmond has demonstrated the necessity for it. In the case of both Mrs. M. and her little daughter, the reports at first were quite encouraging. From the newspapers I quote, March 18th: "Mrs. M., though extensively burned, is not apparently in danger." (*Express*, March 18th.) That the little girl would probably recover

and that Mr. M. was but "slightly burned." When it is considered that the one who was slightly burned, two weeks after was not by any means considered out of danger, and that the two who were thought would recover, passed away, one two days and the other seven days after the disaster. Without calling into question any other cases, it will be seen that we have a lesson to learn right here. Without considering the fatality of shock, we have results sometimes arising from burns, as the ulceration of the duodenum and effects upon the abdominal viscera generally, which calls for at least a guarded prognosis on the part of the physician who values his reputation.

A WORD AS TO PAPOID.

By WILLARD H. MORSE, M. D., Westfield, N. J.

Among some forty new remedies which I have studied therapeutically and chemically, with a view of discussing them in a work supplemental to my book on "New Therapeutical Agents," there is no one that has interested me more or commanded such especial faith as papoid, the well-named vegetable pepsin, a powder prepared from the juice of the fruit of the *carica papaia*, a South American tree, and introduced into this country quite recently. While I do not doubt that many medical men who have employed it will agree with me in saying a "good word" for it, there may be others who are holding it *sub judice*, and may find it an encouragement to its adoption to know that it is most heartily endorsed by such physicians as Professors Finckler, of Bonn; Rossbach, of Jena; Kuhne, of Heidelberg, and other Germans (as Oertel, Albrecht, Tussca, Bouchut, Kohts, Asch, Chaeffer, Heinemann, Croner, Leyden, Drier, Fraentzel and Kriege); in England by Griffith Hughes, George Herschell, Langley and others; and in this country by Abraham Jacobi, Andrew H. Smith, Frederick M. Dearborne and many others. For myself, I could not ask for an endorsement from a higher or more satisfactory authority than the President of the New York Academy of Medicine (Dr. Jacobi).

Leaving out my own experience, these several physicians agree in saying of papoid—

1. That its ability for conversion of albumen into peptones is five times greater than that of pepsin.
2. It stimulates the peptic glands.
3. It is antiseptic and hypnotic.
4. It has a duodenal action.
5. It relieves dyspepsia, diphtheria, anorexia, gastritis, gastric catarrh, and neuralgia of the stomach.
6. The dose is, grs. i-v.
7. It is more than a substitute for pepsin, as in addition to doing all that pepsin does, it acts in presence of an alkali or an acid.
8. It dissolves fibrin, and necessarily the diphtheritic membrane when used as a solution or as a spray.

If more is needed to bring the drug to favor, it might be added that the Brazilian Indians soak their meat in this juice to make it tender, and to preserve it, eating the fruit itself for dyspepsia.

Miscellany.

GUAIAC IN QUINSY.—The use of guaiac in quinsy has met with such success, that the drug is regarded by many as almost a specific for the disease ; more recently, attention has been called repeatedly to the surprisingly good effect of salicylate of soda in acute tonsillitis, and the theory has been maintained that tonsillitis is closely connected with rheumatism ; hence the success of the use of guaiac and salicylate of soda, both of which seem to have a specific action in rheumatism. The value of salicylic compounds in quinsy was first pointed out by Lennox Brown in 1878, in a work entitled, "The Throat and its Diseases," and at the same time he called attention to the relation between quinsy and rheumatism. The idea seems to be that because the salicylates are specifics for rheumatism themselves, whatever they cure must be a form of this disease, be it chorea, headache or sore throat. In a similar way it is argued that neuralgia, bronchitis, headache or whatever disease seems to yield to treatment by quinine, must be caused by malaria.—*Northwestern Lancet.*

MAMMA IN AN OVARIAN TUMOR.—Von Velito claims to have discovered a mamma with glands and nipple complete in a dermoid ovarian tumor. This was hemispherical, and the size of the fist of a child. A nipple projected from it, which when pressed yielded two or three drops of a thick milky fluid. When examined under the microscope this showed numerous spherical fat globules and colostrum crystals floating in a milk-like fluid. The areola was of a pink color and surrounded by small pimples, from each of which projected a $\frac{3}{4}$ centimetres long fair hair. Microscopic sections of the mamma showed glandular tissue of similar nature to that met with in the normal breast.—*London Medical Record*.

EFFECTS OF TOBACCO UPON THE HEALTH.—Madame Walitzkaja, a Russian physician, has examined more than 1000 men, women and children employed in tobacco factories in Charcow. She finds that the constant exposure to the tobacco dust induces nervous disorders of a marked character, such as dilatation of the pupils, exaggeration of the tendo reflex, tremor and dyspnoea. The employees are also subject to headache, fainting, gastralgia, muscular spasms and nervous coughs, without any perceptible disease of air passages. The author has made experiments on rabbits and dogs by keeping them in an atmosphere containing tobacco dust and finds that similar effects are produced.—*Bull. Gen. de Therap.*

A WRITER in Vratsch believes that the posture in sleep influences the extension of a bronchitis. He found, for example, that in the 235 cases referred to, all of whom had this disorder, in ninety-seven it was left-sided, in seventy-two right-sided, and in sixty-six on both sides. He thinks that the preponderance of the bronchitis on the left side was due to the fact that there was a greater expansion of this side during sleep, and, consequently, a greater ingress of cold air or of the morbid particles causing the disease.—*Record*.

SEVERAL cases of priapism have been reported lately where all the ordinary forms of treatment failed to give relief, but the administration of large doses of iodide of potassium caused the gradual disappearance of the affection.

GASEOUS.—An unnecessary fuss is made over the gas-cure for consumption. Quite a number of physicians have been known to depend mainly upon gas for success in various branches of practice.—*Ex.*

SKIN DISEASES.—The most itching skin diseases may be relieved by a warm bath containing a handful of borax, and a like amount of bicarbonate of soda, in about thirty gallons of water.—*Ex.*

EQUAL parts of burnt alum and tannin sprinkled in powder upon venereal warts will dessicate them, and they can be rubbed off in a few days.—*Canada Med. Record.*

A QUACK recommends smoking for the treatment of sciatica, because it is a well-known fact that smoke will cure hams.

THE faculty of the University of Pennsylvania have banished cigarettes from the college grounds.

REBONY recommends the syrup of the lacto-phosphate of lime for the cure of night-sweats of phthisis.

Selections.

ON THE TREATMENT OF FIBROIDS OF THE UTERUS BY ELECTRICITY.

By W. WINDHAM WEBB, M. D., M. R. C. P., London.

The Operation.—Dr. Apostoli does not pretend to make any innovations upon the current theoretical notions as to the treatment of fibroids of the uterus. While others with caustics, tents, scrapings, injections, incisions, ergot, and operations aim at renovating the mucous membrane of the organ, setting up a derivative process, bringing about a dissolution and absorption of the tissues, contraction of the tumor, and diminution of its bulk, with coincident relief of

the attendant symptoms, he maintains that his way of gaining the same ends is by means simpler, easier, certain, and more exactly regulated. There is no mysticism about the matter. Others had essayed the electrical treatment, but not to their complete satisfaction. To account for this was a piece of plain reasoning. If such and such an agent were known to be able to produce such effects, and those effects have not been obtained, the natural conclusion was that there must have been some defect in the method of application, some mischoice of the seat, or some miscalculation in the amount of power employed. It was not difficult to make out that such was the case here. More careful study of the local action of electricity, and experience in the way of utilizing it, disclosed the source of failure. It was proved that much stronger currents than was supposed could be directed upon the internal surface of the uterus, that they could be made to pass through the tissues of a tumor effectively, that the circuit could be completed through the skin harmlessly, and that, by means of the galvanometer the intensity could be exactly adjusted to the nature of the case and the tolerance of the patient. Working downwards from principles to facts, practice was at length brought into accord with theory, and the way opened to success. Tumors could not resist electricity boldly and guardedly administrated.

The fact of the two poles having different local effects regulates their use; they both cauterize. The positive pole is coagulating, and it hardens that with which it comes in contact without destroying its vitality. The negative pole, on the contrary, has dissolvent and destructive powers. The coagulating effect of the positive pole is, in the first place, utilized in transforming the hemorrhagic surface of the interior of the uterus into one that will not allow of sanguineous exudation or excessive secretion, and then in causing contraction of the fibro muscular mass, a lessening of its blood-supply, a lowering of its nutrition, with a consequent partial atrophy. The negative pole is brought to bear upon the uterine cavity and tumor, when reduction of size by electro-chemical action is the immediate object.

These galvano-caustic operations upon the mucous membrane of the uterus are, therefore, of two kinds, according to the nature of the case, and the pole required to be used. The manipulations are, however, much the same in both. But when, from distortion or displacement, the cavity of the uterus cannot be reached by the sound, another mode of procedure is rendered inevitable. To pass the dis-

integrating current through the diseased structure, a puncture is made, and this artificial channel may or may not communicate with the cervical canal or the uterine cavity. It is either reserved for repeated introductions of the sound carrying the current, or new punctures may be made from time to time, on suitably presenting parts of the tumor.

Supposing that one of the galvano-caustic operations is about to be done, I will detail the separate stages of it in the order of their sequence. After testing the working power of the battery, the integrity of the regulators and conductors, and the exactness of the indications given by the galvanometer, so that there may be no chance of a shock to the patient by an interruption of the current of electricity during its application, the first duty is to insure the perfect purification of the hands and instruments to be employed. To disinfect the sound absolutely, it is better to pass it through the fire, or the flame of a spirit lamp, and when cold to plunge it into carbolized vaselin. The instruments should be arranged in the order they are wanted, within convenient reach of the surgeon, and immersed in a solution of phenol in a shallow tray.

The patient, after proper instructions as to what is about to be done and the part she is to play, is then to be placed in position, laying on her back, with the buttocks projecting over the side of the bed, the feet resting upon chairs, the thighs spread out, the abdomen uncovered, and all the dress unloosed. Chloroform is not often necessary, except when a puncture has to be made. The slab of wet clay, with its conductor partly imbedded in its upper side so as to complete the circuit, is now applied to the lower part of the body, avoiding the thighs and the pubic hairs, after observing that there are no pimples or scratches on the skin. Should any be found, they must be protected with collodion, paper or some bad conductor, so as to guard against the concentration of the current at these spots and the consequent eschars. Putting on the clay at this stage gives time for its close adhesion, and the moistening of the skin. Folded linen or a towel is laid over it, and the hands of the patient served to press it sufficiently.

A free vaginal irritation with the sublimate solution is to be made, followed by a digital examination of the parts. The sound, fixed by a screw into its insulating handle, with so much of its length uncovered by the celluloid sheath as corresponds with the uterine measurement,

is next introduced through the cervical canal into the cavity of the organ. This is a part of the operation which demands the greatest care and ability. It must be done without the speculum. The point is made to slip over the pulpy end of the index finger of the second hand, which serves as a guide when placed against the lower lip of the orifice. Every movement in advance or laterally can be thus directed, and assurance can be gained that the sound is fully inserted, and touches the upper end of the cavity. No force must be used, and a gentle insinuating movement will succeed better than a hurried thrust. In retreating from the vagina, the finger should be trusted to gather proof that, in every part of its length, the insulating celluloid sheath, pressing against the neck of the uterus and extending beyond the vulva, is guaranteeing the safety of the canal. Similar precaution about this matter should be continued through the operation, as any slipping of the sheath and baring of the metal would occasion a painful shock, and perhaps derange the position of the sound.

Once satisfied that all is justly arranged and secure, the end of the rheophore coming from the galvanometer is to be made fast in the aperture for it in the handle of the sound, avoiding in the movement any displacement of the instrument, but at the same time making sure that it is not likely to slip out. To give proper support to the sound, and maintain its immobility or direct it, as the point is swept over the mucous membrane of the cavity, it is better to continue the index finger of the hand which holds it in the vagina, or, if it be withdrawn, and the instrument is only kept lightly but firmly between the finger and thumb, the back of the hand should rest against the inner side of the corresponding thigh of the patient.

There must now be a pause of some seconds, so that the woman under operation may recover from any little pain or agitation arising from the introduction of the sound. When this has calmed down, the current of electricity may be turned on, commencing slowly, and not going for the first half minute beyond the strength of 0 or 30 milliamperes. Augment gradually to 70, 80 or 100 milliamperes. For the first sitting it is well to be content with this intensity. The dose that can be borne varies with every patient, and at different times with the same patient, but it should be held as a rule never to cause more than an easily supportable degree of pain in any case. Much, however, depends upon the mode of administration. By cautiously rais-

ing the amount and following the indications of the facial expression, gaining the woman's confidence by stopping as soon as she shows signs of impatience, and limiting the current by her power of bearing it uncomplainingly, in subsequent sittings an intensity of 150, 200, or, if necessary, 250 milliampères may be arrived at. The maximum once reached, it is continued to the end of the operation without change, unless the patient urges a diminution. The operation may be made to last, according to circumstances, for four, six, eight or ten minutes.

The current must be stopped as it was begun, never abruptly, for that would produce a shock. Even with all precautions, the inverse current which is set up when that which has been used is suspended mostly causes a sensation of renewal, so that the patient fancies you are recommencing. The vaginal electrode is now to be detached, the sound carefully withdrawn, and the clay removed from the abdomen. If all has been properly done, the skin will be found cool and without any redness. A vaginal irrigation follows, and a strip of iodoform gauze is introduced into the vagina. The patient should be kept in bed for some hours, or, at any rate, made to avoid exercise or fatigue, and cohabitation with her husband should be forbidden. Uneasiness or slight pain in the abdomen is not an uncommon experience, and it is well to forewarn the patient of the probability; telling her at the same time that it will go off with rest. She must also be cautioned not to feel surprised should she find, for the first twenty-four hours, a small appearance of blood, and afterwards a little purulent discharge. Change the gauze, and wash out the vagina with the sublimate solution every day till the next operation.

The preliminary proceedings are the same when it is intended to have recourse to the negative galvano-puncture. The trocar is to be disinfected, fixed in the handle, and a sheath of celluloid fitted to it, so as to leave exposed as much of the point as may be wanted for a puncture of one, two or more centimètres. Before being used, the whole should be dipped in strong carbolic solution. As the negative pole is made use of with these punctures, the trocar may be of steel. Platinum is too soft to retain a point sharp enough to penetrate hard tissues. Taking off the sheath, it is passed into the vagina and its distal end pressed against the spot chosen for the puncture. The trocar is then steadily thrust through it and into the substance of the uterus or tumor, while an assistant with his hand above the pubes

holds the mass immovable in its place. The rheophore is attached, and the current set in motion. The depth of the puncture, the force and duration of the current, are matters to be decided upon by the operator in taking account of the peculiarities of the case. No formidable punctures are required, and it is advisable to restrict the length of the piercing part of the trocar to the smallest extent that will answer the purpose, always bearing in mind the sometimes abnormal situation of the bladder and the possibility of touching large blood-vessels. The same intensity of current may be employed as for the cauterization of the uterine cavity. The daily vaginal irrigation and change of gauze must be attended to, and the patient should be kept quiet, to avoid suffering and any unpleasant consequences from fatigue or irritation.

The repetition of these operations must be determined by a variety of considerations coming out of the general condition of the patient and the changes going on in the diseased parts. Intervals of two, three or four days may be sufficient when complete repose can be indulged in. With other cases and circumstances, a much longer time may be given. The number of sittings required may be from three or four or more than thirty. Generally the later operations are better supported than the earlier ones, but at no time is the pain more than many patients submit to without murmuring, though where there is any nervousness or apprehension it is prudent to give chloroform to avoid the mischief that might happen from involuntary starting.

There are many practical details and matters of experience, which, when well known and observed, have a great influence upon the success of this method of practice, though separately they may seem to be of comparatively small importance. These would fill up too much space, and must be sought for in the writings of Dr. Apostoli, or, what is much better, by personal observation, by anyone who means to take in hand the operations which we are considering.—*British Medical Journal*.

INDICATIONS FOR THE INDUCTION OF PREMATURE LABOR.

A few weeks ago, Dr. George T. Harrison read an admirable paper before the New York County Medical Association on the *Indications for the Induction of Premature Labor*, which is worthy of careful study. In general terms it may be said that the object sought

in this operation is to give a better prognosis in those cases in which the further continuance of pregnancy, or childbirth at term, involves great danger to mother or child, or both, by artificial termination of pregnancy at a time when the foetus is capable of living outside the uterus. As the chief danger to the mother, in the performance of the operation, is not, as formerly supposed, the mechanical irritation of the uterus, but septic infection, it may be affirmed that, if proper antiseptic precautions be observed, this danger is an avoidable one.

The first and most important indication for the operation is furnished by pelvic deformity of a moderate degree. Theoretically this indication is clear enough, but in practice several difficulties may arise in its fulfillment: *First*, our means for pelvic measurements are imperfect, and only enable us to approximate to correctness. *Second*, the exact period of gestation may be very difficult to determine, in certain cases deviating somewhat from the normal. Irregularity especially occurs in cases of contracted pelvis, from the fact that the head is prevented from entering the pelvic cavity, and thus certain signs of pregnancy are modified. But, having fixed the date of gestation as accurately as possible, we must next decide in what week of pregnancy the induction of artificial labor is indicated. The earlier the labor is induced, so much the less danger of injuring the soft parts of the mother, and so much greater the chances that the child will be born alive; but, at the same time, the prospect of the child's continuing to live diminishes in proportion to its prematurity. On the contrary, the later the labor is induced, the greater the danger to the mother and child, but the better the prognosis for the survival of the child if living. The problem, then, is to choose such time when the child could be born without injury to itself or the mother. To do this we must get an accurate idea of the sizes of the pelvis and the child's head.

In the flat pelvis, the deformity most frequently met with, we have simply to ascertain the measurement of the conjugate diameter. In the equally contracted pelvis the problem is much more intricate. Here we must introduce the whole hand into the vagina, in order to form an idea of the pelvic cavity, and errors are difficult to avoid. To determine the size of the child's head also presents many difficulties. Schröder showed by careful measurements that the head is larger from the twenty-eighth to the fortieth week of gestation than was generally supposed to be the case. But it must be remembered that

the head of immature children are much more compressible than those of children at term. Other criteria which may serve as guides are the facts that large and powerful women, as a rule, give birth to large children, and that the weight of the child increases with the age of the mother and with the number of preceding births. The transverse diameter of the heads of the children of young primiparous women is relatively small; while the contrary is true in multiparæ who are comparatively old. The method proposed by Frankenhäuser and Roth, of determining the relation between the head of the foetus and the pelvis of the mother, is worthy of trial. This consists in passing the child's head into the pelvis, and, by means of the fingers in the vagina, ascertaining if it be possible for the head to descend below the brim. This examination should be repeated every eight days, and operative interference should be resorted to only when the descent of the head below the brim seems no longer possible.

As to the degree of pelvic contraction which justifies a resort to the induction of premature labor, Dr. Harrison believes that in the simple flat pelvis a conjugate diameter of 7.5 cm., or 7 cm. in very exceptional cases, should be the extreme limit. In the equally contracted pelvis, when the shortest diameter is at least 8 cm., it may be said that the operation is justifiable. As a rule, the thirty-sixth week of pregnancy is to be selected, and only exceptionally should the term of gestation be anticipated by operating in the thirty-fourth week.

An indication for inducing premature labor is also given by certain severe diseases which endanger the mother's life and are amenable to no other treatment; while, on the other hand, either a cessation or an amelioration of the symptoms may be expected with the termination of pregnancy. Among such affections is uncontrollable vomiting appearing late in pregnancy. Occasionally it is so severe that operative interference is imperatively demanded. Another disease which may indicate the operation is nephritis; though a distinction must be made between cases in which the anatomical and functional renal disturbances are evoked by the pregnancy, and those in which the disease is an interstitial or parenchymatous nephritis, which either existed prior to conception or was produced during the course of gestation. As to the induction of premature labor to prevent eclampsia, Dr. Harrison believes the indication clear and decided when the urine shows a constantly increasing quantity of

albumin and fatty degenerated cells, and when all other resources prove unavailing. Again, excessive œdema and transudation into the serous cavities may demand the operation. To diagnose between the two forms of nephritis referred to, *nephritis gravidarum* and *nephritis in gravitate*, is no easy task. The clinical phenomena are so nearly alike that the previous history of the case, and the course it took can alone decide as to which form is present in a given case. It has been abundantly shown that in chronic nephritis in pregnant women, there is a great tendency to abortion and premature labor, and not so much to attacks of eclampsia.

A third indication for the induction of premature labor in the interest of the child, is met with in certain cases in which experience has shown that the children died at a certain date of gestation, when this time was not far removed from the end of pregnancy. Some cases of *nephritis gravidarum* come under this category. If syphilis be the cause of death of the foetus, the artificial interruption of pregnancy Dr. Harrison thinks is contra-indicated; for, according to Kassowitz, in latent syphilis of the father or mother, the death of the foetus takes place in each ensuing pregnancy somewhat later; so that in successive pregnancies these are first abortive fruits, then immature macerated, then prematurely born macerated, and finally mature, but diseased children; still later, mature healthy children. On the other hand, we gain nothing by the artificial induction of pregnancy before the expected time of the death of the foetus, for the child is already diseased, and may be considered as lost. In cases, however, in which chlorosis or anæmia of the mother, or changes in the umbilical cord or placenta, have caused the death of the foetus, the induction of premature labor before the critical period may be the means of securing a living child.

It is rare that diseases of the heart or lungs give an indication for this operation, though they occasionally do. Lastly, an indication for the induction of premature labor is furnished by those dangerous and incurable diseases of the mother which would probably cause death before the end of pregnancy, in order to avoid the Cæsarean section *post mortem* or *in articulo mortis*.—*Journal of the American Med. Association*.

*APOSTOLI'S METHOD OF ELECTROLYSIS IN THE
TREATMENT OF FIBROID TUMORS.*

Dr. F. H. Martin, of Chicago, writes as follows:

While there has been, and for good reasons, a great deal of skepticism in the profession in regard to the value of treatment of fibroid tumors of the uterus by electricity, we are able to discern at present a general tendency to investigate its claims and to take advantage of its results. This tendency in the profession to investigate was brought about by the book of Dr. Apostoli, which appeared in 1884. Now, instead of charlatans monopolizing this valuable therapeutic agent, we find men of position in other countries adopting it—Reiman, of Kiel; Deletong, of Nantes; Hite, of Rouen; Adolphe Elsassén, of Stuttgart; William Woodham Webb, of London; Gardner, of Montreal; and in this country Englemann and Hulbert, of St. Louis; Bartholow and Massy, of Philadelphia; Baker, of Boston; and Skene and Freeman of Brooklyn.

I wish to confine my remarks this evening to the consideration of Apostoli's method of treatment of fibroid tumors of the uterus. Dr. Apostoli has done away with the mysterious low current. There is a positiveness about his use of electricity that has never been safely imitated by any other method. The reasons for Dr. Apostoli's success rest upon the following facts:

1. The use of strong currents.
2. The adoption of electrodes that make the use of a strong current possible, without harm to innocent tissues and without pain to the patient.
3. The recognition of the peculiar effects of the two poles and the application of them according to requirements.
4. Accurate measurement of current.
5. Rational discrimination in selection of cases.

By the employment of a strong current, short sittings are made practicable, and definite results are obtained. While the amount of electrolytic work done does not depend upon the strength of current, but upon the quantity, definite polar action depends almost exclusively upon the strength of current.

The electrodes used by Apostoli are in all cases of two varieties, the active or internal electrode, and the passive or external electrode. The active internal electrode is for the purpose of concentrating the

current at the point where it is most needed. This electrode may be simply a uterine probe of platinum, insulated to the cervical point, or a sharp needle of iridium, insulated to within an inch or two of its point, which will penetrate the mass of the growth from the cervical canal. The passive or external electrode is for the purpose of completing the circuit in such a manner that the strong current shall pass through the largest diameter of the growth, and at the same time diffuse the current sufficiently to prevent pain.

When it passes through the sensitive integument, Apostoli uses for this purpose a biscuit of clay, moulded upon the abdomen, properly connected with one pole of the battery. For this purpose, I use an electrode of my own device. Over the concave surface of a plate of soft metal is stretched an animal membrane, which is attached to the edges in such a manner as to render the interspace between the membrane and the metal water-tight. This space, which is from one-half to one inch in thickness, is filled with warm water. The membranous surface is applied to the abdomen, and suitable connections made from the metal with one pole of the battery.

The local effect of the negative pole when employed as the active electrode with a strong current is to produce liquefaction of the tumor with which it comes in contact, and is compared to the effect of a caustic alkali. In fact, it is called and is the alkaline pole. This pole, therefore, on account of its effect of rapid solution of tumors, is employed to reduce the size of these abnormal growths.

The local effect of the positive pole when employed as the active electrode, with a strong current, is to produce coagulation and condensation of the tumor with which it comes in contact, and is compared to a caustic acid. It is the acid pole. The coagulating effect of this pole is utilized with marked advantage in controlling the hemorrhage caused by fibroid tumors. Whenever the entire cavity of a bleeding wound can be reached with the positive pole of a sufficiently powerful battery by means of an electrode of platinum, the hemorrhage can surely be checked.

When a current of sufficient strength is employed to obtain the characteristic effect of the electrode, as described above, in order to be of value in the treatment of fibroid tumors, a current of from fifty to one thousand milliampères is necessary. A current of this strength should never be used without proper means of measurement at hand. The strength of the current employed should be varied with the work

to be accomplished and the extent of active surface of the internal electrode in contact with tissues to be acted upon.

This scheme of treatment, which I have not been able in the time allotted to more than suggest, is capable of producing rapid and beneficial results. The most distressing hemorrhages can be permanently checked by the coagulating effect of the positive electrode; the most excruciating neuralgic pains, so often accompanying fibroid growths of the uterus, are almost invariably relieved; the smaller tumors are removed entirely, and the large ones rapidly reduced in size by the local effect of the negative pole and the electrolytic and cataphoric action of the current passing through the growth.

The method is free from danger if properly employed. I have yet to see an untoward symptom arise from its use. Its use is accomplished without producing pain enough to require an anæsthetic. The applications are best made in the office.

ANALOGY BETWEEN ACUTE IDIOPATHIC PLEURITIS AND ACUTE ARTICULAR RHEUMATISM.

Dr. E. L. Shurly, of Detroit, read an instructive paper on this subject before the recent meeting of the Michigan State Medical Society. He shows that the ordinary etiology, viz., exposure to cold, is unsatisfactory in explaining the development of acute pleuritis, and relates the instance of three apparently equally healthy men remaining all night in the forest in the autumn with the following results: One was attacked with acute pleuritis, one with acute rheumo-arthritis, while the third escaped disease.

The same cause—exposure to cold—is set down as an important factor in the development of acute articular rheumatism, but the vital change taking place between the “exposure” and the resulting disease is yet shrouded in mystery. The author then goes on to show that we must look for some antecedent constitutional condition in order to explain the different results arising from the same apparent cause. He finds this antecedent condition to be the rheumatic diathesis, the working of the morbid agent being now turned towards the pleuræ, now towards the serous membranes of the joints. He arrives at this conclusion in three ways:

1. Histologically, all the fibro-serous membranes are identical, all proceeding from the meso-blast, or middle of the primordial layers,

and ultimately developing into the endothelial layer, or lining proper of all closed cavities. This is situated upon a basement membrane, proliferated, probably, by the fibrous tissue or layer surrounding it, and constituting the framework. To this endothelial layer in all cases belongs the secretory property of the part, which we know varies, as, for example, the presence of mucin in the synova. The statement of some histologists, that in the case of the joints, the fibrous, basement and synovial layers are proliferated from the outlying cartilage, does not alter the case, because the histological characters of the fully-formed tissues are the same; neither does the mode of origin and arrangement of the lymphatics, which seems to be an undecided question, for we know that each fibro-serous membrane must have, and does have, its lymphatic system in one form or another. Therefore, we must accept as a fact that these several serous membranes belong to the same anatomical system.

2. Pathologically, also, the identity of these diseases is well marked. In acute pleuritis, pericarditis, peritonitis and rheumatic or simple synovitis, the steps of the disease process are the same, or nearly so, viz. : hyperæmia, effusion (either fibro-serous, lymph, blood, pus, or a mixture of these). The ultimate disposal of the effused material is nearly the same for each locality; for there may be complete or partial absorption, calcareous or fatty degeneration, adhesion and pyogenesis in either disease.

3. Clinically, the history of these diseases exhibit close resemblances—the degrees of constitutional or local disturbance, the mode of attack, the intermittent or remittent or continued character of their course, or pyrexia and their complications. Lastly, the evidence from treatment is important, many cases of acute idiopathic pleuritis yielding only after a course of anti-rheumatic medication.

This imperfect review does not do justice to the paper, which is worth reading in its entirety.

ALBUMINURIA IN HEALTH.

The occasional appearance of albumen in the urine of apparently healthy persons is a fact of no mean clinical importance. The British practitioner is quite aware of the usually grave signification of albuminuria, even when the albumen is scanty, and he is perfectly cognizant of the ordinary chemical test for that compound. Hence, it is important that he, as well as the hospital physician, should not

jump to the conclusion that a trace of albumen necessarily means serious kidney disease. Dr. C. von Noorden, of Giessen, has recently contributed a monograph on "Albuminuria in Healthy Persons" to the *Deutsche Archiv. für Klinische Medicin*. He classes "physiological" albuminuria into three groups. In the first group, the albuminuria is generally found in weakly youths between the ages of puberty and twenty, rarely in children or in adults. The presence of albumen is discovered in these cases either during clinical statistical researches, or else in persons who send for the medical attendant because they feel faint, weak, or otherwise slightly indisposed. The proportion of albumen differs greatly at intervals of a few hours. It may run up from 0.0 to 0.5 per cent., or higher, in a single morning. Rarely, if ever, is the urine continuously albuminous all day. These conditions are very characteristic of physiological albuminuria, and do not exist in any form of nephritis. The urine is pale, clear, and generally, but not always, of high specific gravity. The albumen is always coagulable on boiling. Occasionally a globulin-like compound has been detected in excess of the serum-albumen. Casts very rarely are found, and, if present, they are hyaline, never epithelial. The albumen is always to be found in greatest quantity before noon. In some cases of physiological albuminuria no abnormal general condition could be found; in others, muscular pains, errors of diet or mental excitement have been observed and assigned as causes of this condition. No evidence of renal disease has ever been proved, nor of altered conditions of the blood. Dr. von Noorden believes that it is more likely due to blood-changes themselves, possibly caused by slight renal disease, than by disturbed filtration in the tubuli uriniferi, as Leube has suggested. In the second class of cases, mucin is present as well as albumen. In this case, again, the albuminuria is most marked before noon. The mucin might be derived from the lower part of the urinary tract, or from the kidney itself. The proportion of albumen is very variable, and much influenced by bodily exertion. In raw recruits it is most abundant after heavy drill. Dr. von Noorden believes that this class represents mild vesical catarrh. The third class of cases, on the other hand, appears to represent slight renal catarrh, insufficient to cause the general and local symptoms of renal disease, just as, in the second, the subjective signs of cystitis are present. In striking contrast to the first class, the albuminuria

may last for a whole day and then disappear, or may be found only before noon, yet in regular but very small proportions. No mucin can be detected, but hyaline, and sometimes epithelial casts, and even red corpuscles, are generally present. The first class is evidently the purest kind of "physiological" albuminuria. Yet this term is still questionable, for a trifling amount of disease in the genito-urinary apparatus is a more probable cause of the condition in question than any unusual "physiological" tissue-change, caused by exertions after heavy meals, etc. Physiological albuminuria, then, must be held to imply albuminuria in persons who appear to be otherwise healthy, though local disease is, in all probability, present to an extent insufficient to produce any other symptom.—*British Medical Journal*.

ON NASAL VERTIGO.

Dr. Joal, of Mont Dore, read a paper on this subject before the French Congress of Laryngology, in April, 1887, in which he stated the following conclusions :

1. There exists a nasal vertigo, a true *vertigo a naso laeso*.
2. It belongs to the group of reflex vertigos, such as gastric, laryngeal, uterine vertigo.
3. Irritation of the trigeminal filaments innervating the mucosa of the turbinated bodies, and the septum, is the starting point of the condition.
4. This irritation is transmitted to the vaso-motor nerves through the sphenopalatine ganglion, whence arises circumscribed anæmia of the brain and vertigo.
5. The affections which give origin to vertigo are (1) nasal fluxions (odors, irritant vapors, snuff, flowering grasses); (2) acute coryzas; (3) chronic catarrh, especially the hypertrophic form; (4) mucous polypi; (5) post-nasal catarrh.
6. Vertigo is especially provoked by nasal affections of little importance.
7. The nasal reflexes are principally developed in arthritic individuals.
8. Vertigo can occur alone or be accompanied by other nervous phenomena—troubles of vision, *muscæ volitantes*, hemicrania, nausea, vomitings, great excitability, hypochondria, intellectual disability, nightmares, spasmodic cough, dyspnoëic cases, exaggerated secretions, syncope, feeble pulse, pallor of the face.

9. In order to establish a diagnosis, the nasal fossæ should be examined in every individual suffering from vertigo.

10. The recognition of nasal vertigo will sensibly diminish the number of cases of gouty, rheumatic, anæmic, congestive vertigos, as well as cerébro-cardiac neuropathy.

11. Vertigo ceases with the cure of the nasal affection to which it owes its origin. The condition has no connection whatever with Meniere's disease, and is independent of any affection of the ear. The author cites nine cases, on which, together with cases recorded by Massei, Guye, Gnuaro, Hering, Hack, and others, his essay is founded. —*Journal of Laryngology and Rhinology.*

ASCITES IN CHILDREN.

Ascites in children is a rare disease. If it happens, it is generally produced either by tubercular peritonitis, or by cancer of some of the abdominal organs. Dr. Seiler, in Dresden, contends *Berl. Klin. Wochenschr.*, xviii., 26, p. 365) that whenever the causes just mentioned cannot be detected in ascites of children, a diffused syphilitic hepatitis or circumscribed gummata will *always* be found to have given rise to the abdominal dropsy. He thinks that the cases so far reported belong to the category of retarded hereditary syphilis, and that this form of ascites always yields to mercury or iodine, or to a combination of both. At the same time, he admits that occasionally this ascites may be caused by a curable, simple hypertrophic cirrhosis of the liver. For better explanation, Seiler gives the history of four cases:

1. A girl, aged 13, after having frequently complained of not feeling well, without the appearance of any specific signs or symptoms, was taken sick, February of last year, with swelling of the abdomen, which on examination was found to be distended with a rather large quantity of free fluid. June 11th, about five quarts of a serous, light yellow fluid, containing a considerable percentage of albumen, was withdrawn, by paracentesis, from the abdominal cavity, after which operation the liver could be felt as a soft tumor extending down below as far as the middle of the abdomen. Mercurial inunctions into the abdominal walls, and internal administration of iodide of potash, caused a diminution in the size of the liver, and the ascites did not reappear. Cure within six weeks.

2. A four-year-old girl, with really enormous ascites; otherwise perfectly healthy. By paracentesis, four quarts of turbid serum was withdrawn, when it was found that the liver reached as far as the crista ilei. Seven weeks later, tapping had again to be resorted to, but this time the quantity of the fluid was less. The same treatment as in the first case was continued for two months, when a tonic treatment was instituted. When, eight months after its admission, the child was discharged from the hospital, the ascites had disappeared, but the liver was still a little lower down than the middle of the abdomen. Seiler saw the girl again when she was thirteen years old, and, on percussion, found the size of the liver to be normal. The ascites had never returned.

The third and fourth cases concern a seven and a fifteen-year-old girl, and contain nothing of special interest, their history being similar to the first two cases.

That there may be still other causes producing ascites in children, there can be no doubt; the writer of this saw one in which, in consequence of intense inflammation of the portal vein (due to a cold?) and occlusion of the same near its entrance into the liver, the most intense ascites developed itself in a boy nine years old. The case ended fatally. Kormann has also reported another case (*Jahrb. f. Khkde.*, xvi., p. 170, 1880,) in which the etiology did not coincide with that given by Seiler.—*Medical and Surgical Reporter*.

FUNCTION OF THE THYROID GLAND.

One of the most interesting series of researches regarding the function of the thyroid gland has been recently published by Prof. Herzen, of Lausanne.

From the results of numerous cases of removal of this body in connection with the physiological functions, as demonstrated by MM. Albertoni and Fizzoni, it is probable that the vexed question as to the use of this organ is now settled. The above-named gentlemen believe that they have discovered the real function of this gland, and after a careful study of the blood of animals deprived of this gland, have come to the conclusion that it gives to hemaglobin the faculty of absorbing oxygen. The fact is, that the blood of animals which have been deprived of the thyroid gland contains a very small proportion of oxygen; their arterial blood contains less of this gas than the

venous blood of healthy ones; and the investigators ascribe the symptoms of acute cachexia strumipriva in dogs to this very considerable diminution of oxygen which always followed upon enucleation of the gland.

The following case of removal of the thyroid gland, reported in the last number of the *London Lancet* by James Gordon, M.D., is indicative of the correctness of Italian observations. Of the several cases reported, that of Mrs. A. will serve as a type. She was a widow, aged forty-two, who had a large goitre of several years' standing; operated upon by Prof. Lister eleven years ago; the entire thyroid gland completely excised; recovery from the operation perfect. The following characteristics were manifest in the course of the next few months: total change of voice, which could not be recognized by her own mother; her face was likewise so remarkably changed that no one knew her; it was of a sallow, pasty paleness, swollen about the eyelids, above and below, presenting a waxy, transparent look; the lips—formerly thin—were swollen and of a purple color; the entire expression had changed from that of natural brilliancy to almost imbecility; her manner of speaking had changed likewise—it was embarrassed and hesitating; the fingers became more gross and red, and were swollen; she could no longer button her dress nor perform any delicate operation with the hand—such as picking up small objects from the floor; the special sense of touch was gone; a general tendency to general paralysis ensued; the tongue became swollen; skin dry and rough; hair fell out; eyebrows became thin and scanty; memory impaired; the least pressure upon the skin left a livid mark behind, so that she was constantly ecchymosed about the hand.—*Indiana Medical Journal*.

CANCER IN JAPAN.

Through the kindness of Dr. Cushing, we received a reprint of "Contributions to Surgery," by Dr. Hashimoto, Imperial Surgeon to the Japanese Army in Tokio, which were published originally in Langenbeck's Archives. The contributions cover a large field, and contain much valuable personal experience.

We were particularly interested in the contribution to the treatment of carcinomata and sarcomata. Careful scientific observations on these malignant growths in a people whose social habits are so very different from our own, for the mass of the people in Japan still

retain their old habits and modes of living, are very interesting from an etiological standpoint. Carcinoma of the breast is of very frequent occurrence among Japanese women, (Dr. Hashimoto having operated on about forty cases during seven years,) and this disease from the most ancient times has been treated by operative procedures in Japan.

The frequency of carcinoma of the breast in Japan is very interesting, because of the difference of dress between the European and the Japanese women. The Japanese women do not wear corsets, or any article of dress which would be apt to irritate the breasts. They wear a broad band of soft cloth or silk around the body below the breasts, tied behind in a large bow-knot.

Carcinoma of the uterus is also very frequent, but patients usually seek the surgeon's advice too late to permit of any other than palliative treatment.

Carcinoma of the tongue is common, but of the lip rare. In reference to the theory of the initiation of the pipe causing carcinoma of the lip, he says that the common people in Japan hold the pipe in a different way from the Europeans. They have a pipe with a very long stem, from which they take a few whiffs, and then lay it aside to be again resumed after a short interval.

Carcinoma of the gullet is common, especially among "sake" drinkers. "Sake" is a kind of alcoholic beverage made from rice, which tastes somewhat like sherry. It is very difficult to understand how such a mild liquor should give rise to cancer. The Japanese for "cancer of the gullet" is "*kak*," and signifies no longer able to eat rice. The *exitus lethelis* occurs about eight or ten months after the disease has been first noticed.

We are indebted to Dr. Cushing for our information about the customs of the Japanese.—*Pacific Medical Journal*.

IODOL: AN EFFECTIVE SUBSTITUTE FOR IODOFORM.

Practitioner, Vol. XXXVIII., No. 5, 1887.

Dr. R. Norris Wolfenden, the author, concludes as follows: Iodol is very rich in iodine, containing only seven per cent. less than iodoform, but parting with it more readily than the latter body. No toxic symptoms follow its constant use, and it is, therefore, preferable to

iodoform on this account, and also because it is quite as effective, and further possesses neither smell nor taste. It is one of the best applications for ulcerations of the mouth, pharynx, larynx, and nose, ozaena, scrofulous ulcerations, specific conditions, etc. The author confirms the statements of Lublinski, that the ulcers of phthisical laryngitis will heal completely under daily insufflations of iodol. He uses the following preparations :

1. Insufflations of pure powder. It is more important to cover the diseased surface than to measure the dose.
2. Mazzoni's solution : Iodol, 1 part ; alcohol, 16 parts ; glycerine, 34 parts—a useful brush application or coarse spray.
3. Iodol, 1 drachm ; glycerine, 1 drachm ; vaseline, 7 drachms—as a brush application.
4. Pastilles of iodol, iodol, 1 grain ; glycerine, 1 minim ; glyco-gelatine, 18 grains. These are much preferable to iodoform pastilles and are the most serviceable of all for chronic pharyngeal conditions.
5. Iodol, 1 drachm ; ether, 1 ounce—a spray or brush application.
6. Iodol bougies, containing $\frac{1}{2}$ grain iodol in each, for nasal conditions.
7. Iodol wool, 10 per cent. for tampons, etc.
8. Iodol gauze for dressings.

Iodol possesses all the properties of iodoform, is antiseptic, anæsthetic, a promotor of granulation and healing, arrests suppuration, and deodorizes foul secretions, and is to be preferred to iodoform on account of its pleasant and slight odor and absence of taste. Its effects are quite as rapidly obtained.—*Journal of Laryngology and Rhinology*.

HYPNOTIC MEDICATION.

Hypnotic medication is addressed only to the symptoms of insomnia and excessive erethism, which, in many cases, will produce disastrous results if not relieved. These symptoms may be produced by a number of distinct diseases, and in each case a special hypnotic must be chosen, although all hypnotics produce sleep in the same manner, viz., by producing anæmia of the cerebro-spinal axis.

Chloral is the most powerful of hypnotics, and is indicated where the patient is of a sanguine temperament and robust constitution. On account of its irritating properties, it should not be used in gastro-

intestinal disorders or when the heart is diseased, except in cases of active cardiac hypertrophy.

Paraldehyde may be employed as an adjuvant of chloral, and in cases where chloral is contra-indicated. It may be employed in convulsive diseases.

Hypnone, although its hypnotic powers are doubted by some physicians, will, according to Dujardin-Beaumetz, produce sleep in cases of cephalalgia, and meets some special cases in psychiatric practice.

Urethan should be used as a hypnotic in cases of heart disease and the treatment of insomnia in children.—*Revista Med. de Sevilla*.

POISONING AFTER INJECTIONS OF CORROSIVE SUBLIMATE.—Fleischmann, the first assistant in the obstetrical clinic at Prague, adds another to the long list of deaths following the use of corrosive sublimate injections during and after labor. Two injections were given, one before and one after the examination of a young primipara; shortly after the second there was a discharge of bloody mucus from the vagina, followed by severe abdominal pain, a serous diarrhoea and vomiting of a quantity of bile; on the following day, labor was completed without difficulty, and as the symptoms of the day before were attributed to the absorption of a small quantity of the mercurial salt, carbolic acid injections were used during the after-labor. The mischief, however, had already been done, for, after exhibiting symptoms that pointed indubitably to mercurial poisoning, the woman died on the sixth day. The *post-mortem* examination showed spongy and swollen gums, ulcers on the tongue and pharynx, superficial ulcers in the ascending colon, and a high grade of acute inflammation of the kidneys. Dr. Fleischmann ends his communication in the *Centralblatt für Gynäkologie* with an impressive appeal to the profession to banish corrosive sublimate from obstetrical practice.—*Provincial Medical Journal*.

A CASE OF ACCIDENTAL VACCINIA RESULTING IN DEATH.—By Melville Jay, M. R. C. S., L. R. C. P., North Adelaide (*Australian Medical Gazette*, January, 1887).—A child, aged eight months, was the subject of eczema of the face, neck and chest. The sister of this child, aged two and a-half years, was vaccinated in the ordinary way, the vesicles going through the usual course. In about three weeks

afterwards a vesicular eruption appeared on the infant, and was accompanied with feverishness, restlessness, etc. In about six days later the eruption presented all the characteristics of confluent small-pox. It was clear that the raw surface of the eczema had become infected by the virus of the vaccine pock on the elder child's arm, as the two children had slept in the same bed. The case went on well up to the fourteenth day, when she refused food, and symptoms of collapse presented themselves, and the child gradually sank, and died on the following day. The mother, who had not been vaccinated since infancy, developed several well-marked vesicles on both nipples and breast, neck and cheek. These ran through the typical course of vaccinia.

COCAINE INEBRIETY.—Dr. T. D. Crothers concludes a paper in his *Quarterly Journal of Inebriety* as follows :

"The use of cocaine to excess in persons who have never used alcoholic or other narcotic drugs before, is very rare. Among inebriates and drug maniacs, cocaine inebriety is no doubt increasing. Its peculiar dangerous effects on the body will prevent its general use as an intoxicant to any great extent. It acts more rapidly than opium, but its effects pass off more quickly. Its first effect is more exhilarant than alcohol, but it is uncertain and variable. This stimulant action develops mania, followed by narcotism and melancholia. When given in cases of melancholia in large doses, it changes the case to mania, then finally relapses, bringing back the case to melancholia again. As an intoxicant it is more dangerous than alcohol or opium. As a form of inebriety it is more difficult to treat, requiring a longer time to break up, because of the physical complications. It cannot be used as a substitute for any other narcotic, or as an antidote or remedy."—*Practice*.

ANILINE TREATMENT OF PHTHISIS.—Kremiansky's treatment was submitted by the Moscow Congress to investigation. The committee, consisting of Drs. Ostrumuff, Subertin, Shervinski, Klein, Voght and Bogoslovski, after a number of experiments subcutaneously and by inhalation, condemned the treatment and refused to make further investigation of the drug. Symptoms of paralysis of the respiratory center occurred even when given in very small quantities. It caused extreme disgust and appeared to be utterly useless from a therapeutic point of view.—*Technics*.

SUCCUS ALTERANS IN RHEUMATISM AND SYPHILIS. — We are reliably informed that the preparation Succus Alterans (McDade) is becoming a very popular remedy with the profession, and being very extensively prescribed in general practice as an alterative tonic, aside from its use in syphilitic diseases. The good results from its use in treatment of rheumatism, of chronic character especially, is worthy of consideration. The remedy is certainly growing in favor, and as no great claims have ever been made for it, but simply placed upon its own merit, we think it could possess no higher recommendation. — *Indiana Medical Journal*.

ARSENATE OF LITHIA FOR DIABETES. — Dr. Martineau recommends carbonate of lithia, 3 grs.; arseniate of soda, 1-10 gr.; carbonic acid water, 2 pints. Solution is effected under pressure. The effervescing liquid is taken mixed with claret, the foregoing dose to last for at least three days, being taken at the two principal meals of the day customary in Paris. No change of diet is necessary. Dujardin - Beaumetz and others are skeptical about the value of this treatment, but it is simple and easy, and when the patient is not dangerously ill, it will do no harm to try it. — *Technics*.

Editorial.

SELECTION OF A MEDICAL SCHOOL.

The time is near at hand for the student intending to study medicine to select a school. It is our duty as preceptors and instructors to give such men a word of advice as to the college where they will spend their valuable time and money, perhaps their all. It is our duty first to see that they are qualified; therefore, select a college where the *entrance examination is demanded*. No student wishes to spend two or three years in a college, attempting to learn an art which he has not the ability to understand. Therefore, if we are honest with these young men, and we perform our duty to them, we will find out if they have the ability and education to start. It is far better the student should know if he is not qualified and fit himself at once

by study, or direct his attention to other fields of labor. It is a painful sight, indeed, to see young men who supposed they had a "good enough education," who have been licensed by some college, having obtained a diploma, at last realizing that they are not qualified; that their preliminary training was deficient. If they are qualified, where shall they attend? Shall they try the old and worthless plan, or the one which guarantees a successful career. If any student has doubt on this subject, let him read the following wise words from the authorities of Syracuse University, and he cannot fail to be convinced:

"There are two systems of medical education in vogue in this country. One system opens its inviting arms, without discrimination, to every applicant for medical honors, whether he be the well-trained and science-loving student, or an adventurer fresh from the forest, the anvil or the stable, whose whole literary education consists in a slight and perhaps contemptuous acquaintance with the three R's.

This system requires the student to hear lectures every day on all the branches taught, the most advanced as well as the elementary. It compels him to listen to lectures on surgery, pathology, therapeutics and obstetrics, while as yet he knows not a single syllable of anatomy, physiology and materia medica. It obliges him to waste many an hour every day of his scant first course in hearkening to what he cannot by any possibility fully comprehend, when these hours are all needed in studies which are pre-requisite. Its second, which is its final course of lectures, is a repetition of the first, with the very slightest variation; the same able actors reciting the identical parts which they rehearsed the year before.

Its first compulsory examination to test the faithfulness, ability and memory of the pupil is at the close of this twice-told course; and this examination is not infrequently so brief and superficial as to be of necessity almost worthless. The great men of the profession who were subjected to this system became eminent not as a result of this system, but in spite of it.

A better system with severe requirements would have given

them a better start, and would also have excluded a horde of incompetent and dangerous pretenders from the profession.

This better system of medical education, the natural or graded one, is no longer a dreamy speculation. It has been fairly tested, and it has been found efficient. Those who know it best give it the heartiest approval. Its requirements for matriculation are, or should be, more and more exacting every year.

Its written and oral examinations are frequent and thorough. Its yearly and final ordeals are very searching, but the students who have brains, application and faithfulness come through triumphantly. Even those whose natural capacity is not great succeed remarkably. Under a natural system their mental growth is rapid and astonishing. At the last they seldom fail, because their time has been husbanded and properly employed; because their studies have been interesting and delightful, inasmuch as they have been thoroughly comprehended and mastered, every step of the way.

These two systems of medical education may be contrasted briefly thus:

In one case: no preliminary examination; only two short courses of lectures required, the second identically with the first; the novice required to attend lectures on every subject every day, neglecting preliminary work because the time which might have been devoted to it has been worse than wasted in hearing learned talk which he was not prepared to understand; valuable clinical and laboratory opportunities wasted; no examinations to advance to higher grades, for there are no grades; a final examination which is so superficial in many instances as to be little better than a farce, and whose meshes are large enough to let mediocrity and inferiority, as well as the superiority, which is always present, pass through with greatest ease.

In the other case: preliminary examinations which require a certain, even if insufficient, preparation; three years of training at the college, the novice beginning at the beginning; all his time employed in hearing and doing what he can and should

understand; his capability and progress tested in each department by weekly oral and monthly written examinations; his advance from grade to grade checked if his fitness be not established; thorough clinical and laboratory work; searching yearly examination; and a final examination, which, although of great severity, does not, except in rare instances, result in rejection, because the student has been educated in a way which accords with nature and does not violate it.

Of these two systems, which is likely to be the better?"

It too frequently happens that students, after they have spent their valuable time and money for a course in college, find that it is absolutely worthless, and they are obliged to drift into various trades. Some few are able to go to Europe or a post graduate school to prepare. The long and thorough course may cost more, but the money will be returned to every student who takes it, with a high rate of interest. Other reasons why we would select a college with a thorough course are, that state boards and colleges of good repute are demanding more and more of the student and new practitioners. The State Board of Illinois does not consider a college to be in good repute unless it demand an entrance examination; and in a few months it will demand that every college require three years. The College of Physicians and Surgeons will, at its next year's session, demand a rigid entrance examination. In view of these facts, no student can afford to attempt to enter a profession handicapped by a superficial education.

INTERNATIONAL MEDICAL CONGRESS.

The preliminary work in all the departments of the Congress is progressing very satisfactorily. From this city there will be a great number in attendance. Dr. Judson B. Andrews, who is president of the Psychological Section, will read a paper on "The Distribution and care of the Insane in the United States." Dr. Floyd S. Crego, who is a member of the Council

of the Psychological Section, will read on the "Cause and Cure of Sleeplessness" before his section; he will also take part in the discussion of the subject, "The Relation of Syphilis to Insanity." The work of this section has progressed most favorably, as we would expect under the management of a gentleman with such executive ability as Dr. Andrews. The non-participation of the New York and Philadelphia physicians is to be regretted, but the time of the section is so fully taken up by noted men from abroad, that it would be difficult to see how any space could have been given to them had they joined the section. That all will be present there is no doubt. Dr. Geo. E. Fell will give a description of his already-celebrated and successful effort to resuscitate a person with opium narcosis by means of laryngotomy and the bellows.

It is said, for well-known reason, that in several sections the eminent men in this country have failed to respond to the call to participate, but the talent from all the foreign countries is of the very highest. The work will commence promptly on Monday, Sept. 5th.

The following, from the *American Medical Journal*, will prove of interest:

CONDITIONS OF MEMBERSHIP IN THE NINTH INTERNATIONAL MEDICAL
CONGRESS.

"Rule 1. The Congress will consist of such members of the regular medical profession as shall have registered and taken out their ticket of admission, and of such other scientific men as the Executive Committee of the Congress may deem desirable to admit. The dues of membership for residents of the United States will be ten dollars (\$10). There will be no dues for members residing in other countries. Each member will be entitled to receive a copy of the *Transactions* of the Congress when published by the Executive Committee.

This rule, plainly defining the conditions for acquiring membership and participation in the approaching International Medical Congress, was adopted and published in English,

French and German, in Circular No. 1, issued and widely distributed in both this country and Europe by the Executive Committee more than two years ago. It was repeated in Circular No. 2, issued in July, 1886, and also republished in most of the medical periodicals of this country. And yet we notice that some of our State and local medical societies have appointed *delegates* to the Congress, and we are often receiving letters making inquiries touching the same subject. Hence, we have again quoted the rule, and wish to state explicitly that the doors of the International Medical Congress will be thrown open to all members of the regular medical profession, in all countries where such profession exists, who may apply to the Registration Committee in Washington, D. C., enter their names in full on the roll, and take their tickets of admission. Those residing in this country must pay, at the time of registering, the \$10. From those residing in other countries no fee will be required.

In regard to the registration of educated dentists, about which there has been some question, it is sufficient to say that the same rule will be followed as governed at the London Congress of 1881. The establishment of a Section of Oral and Dental Surgery is a full admission that it constitutes a part of the domain of general medicine and surgery, and that all who, by education and proper legal authority, practice in that special department, are "members of the regular medical profession." At the London Congress they registered with the common prefix "Dr.," as did a large proportion of eminent members of the profession in other departments. At the Congress in Washington it will be proper for them to register with the title Dr., M. D., D. M. D., or D. D. S., according to the terms of the authority conferring upon them the right to practice their profession."

The fares on all the railroads have been reduced to one and one-third full fare for the round trip for members and their families, but all who wish to avail themselves of the reduced rates must apply to J. W. H. Lovejoy, M. D., No. 900 Twelfth street, Washington, D. C., for just as many certificates as they have persons intending to go.

NEW REMEDIES—McKESSON & ROBBINS.

We would call the attention of our readers to the new remedies and elegant preparations offered to the profession by McKesson & Robbins. As will be seen in the closing lines of their advertisement in this issue, they offer to send to any physician asking for them, monographs giving the most recent observations as to the use of various new remedies. We would especially advise a trial of the new drug Salol, which they offer in convenient form for administration, and their label is a guarantee of purity. Salol, or Salicylate of Phenol, is composed of 40 per cent. of carbolic acid and 60 per cent. of salicylic acid. While rather more efficient than salicylic acid or salicylate of soda, it possesses the great advantage of being tasteless and in not producing any gastric disturbance.

In the October (1886) number of the JOURNAL, we gave a translation of the earliest reports on the use of the new drug, and since then experience has fully confirmed these observations.

WE call the attention of physicians and druggists to the new law, relative to the refilling of a certain class of prescriptions.

We believe that many patients have become victims of the opium habit from the facility with which they could have prescriptions containing anodynes refilled. The remedy for this evil will be had in the enforcement of the new law :

AN ACT to regulate the sale of morphine by druggists and apothecaries in this State. Passed June 21, 1887; three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows :

SECTION 1. From and after the passage of this act, no pharmacist, druggist, apothecary or other persons shall re-fill, more than once, prescriptions containing opium or morphine or preparations of either in which the dose of opium shall exceed one-fourth grain or morphine one-twentieth grain except with the verbal or written order of a physician.

SEC. 2. Any person violating the provisions of section one of this act shall be deemed guilty of a misdemeanor, and shall, upon conviction thereof, be fined not less than ten dollars nor more than twenty-five dollars, in the discretion of the court, for each and every such offense.

Book Reviews.

M. Pasteur et la Rage. Par DR. LUTAND, Redacteur en Chef du *Journal de Medicine de Paris*. P. 440; 12mo.

That a prophet is not without honor, save in his own country, is a truth which certainly applies to M. Pasteur. Dr. Lutand has been one of the most active and brilliant opponents of the Pasteurian system of preventive inoculations, and has been indefatigable in the collection of statistics to prove that as a prophylactic measure it has been an utter failure. Lutand takes as a motto one of Pasteur's own sayings: "The greatest fallacy of the human mind is to believe things to be true because we wish that they may be true." The author claims that Magendie discovered that dogs under certain conditions would not acquire rabies, but Galtier first studied the transmission of rabies from the dog to the rabbit, and that Dubois demonstrated that the nervous centres are the principal seat of the morbid virus. He even doubts the existence of any such disease as rabies in man, claiming with a considerable show of truth that the real disease is tetanus. Finally he claims that although rabies or tetanus has been produced in man in a number of cases by M. Pasteur, there is no evidence that it has been prevented or cured in a single case. On the whole, the book is very readable, and we recommend it to readers who desire exact information concerning the method and its results

A Text-Book of Pathological Anatomy and Pathogenesis. By ERNST ZIEGLER, Professor of Pathological Anatomy in the University of Tubingen. Translated and edited for English students by Donald MacAlister, M. A., M. D., F. R. C. P., University Lecturer on Medicine, etc., etc. Three parts complete in one volume. New York: Wm. Wood & Co. 1887.

It would almost seem that every good book, published in whatever tongue, will sooner or later be offered to American readers by these indefatigable publishers; and not only so, but translations bearing the imprint of Wood & Co. are commonly

much better books than the originals. The present one, for instance, has been wisely edited and translated by Dr. MacAlister, and additions have been made even to the last German edition, which increases greatly the value of the book to American readers. The book, originally issued in three parts, now makes a handsome volume of over 1,000 pages. The illustrations are excellent. In its present form, the work will be found most valuable by all English and American workers in pathology.

A Practical Treatise on the Diseases of the Hair and Scalp. BY GEORGE THOMAS JACKSON, M. D., Instructor in Dermatology, New York Polyclinic. New York: E. B. Treat, 771 Broadway. 1887. Price, \$2.75.

In this book of some 400 pages, the physician will find a good summary of the present knowledge concerning the diseases of the hair and scalp. As the author has given special attention to the diagnosis and treatment of these affections, the purchaser will find the book a very valuable and convenient one. The knowledge and information easily had from it on any subject, within the scope of the work, could not otherwise be obtained without consulting many books and expenditure of much time and labor.

On the Pathology and Treatment of Gonorrhœa and Spermatorrhœa. BY J. L. MILTON, Senior Surgeon to St. John's Hospital for Diseases of the Skin, London. Octavo, 484 pages. Illustrated. Price, bound in extra muslin, \$4.00. New York: William Wood & Co.

This is a book which has the merit of thoroughness. It is not introduced for a class-book, but rather for the use of the experienced practitioner. The aim of the author has been "to separate clearly what might be looked on as established from what was doubtful, and not merely to prove every assertion, but to place it on such a basis that it could not be disproved." In this he has succeeded sufficiently well to make a book which ought to be in the hands of every practitioner who sees anything of venereal disease.



VOL. XXVIII.

OCTOBER, 1887.

No. 3

Original Communications.

*NINTH INTERNATIONAL MEDICAL CONGRESS.

HELD AT WASHINGTON, D. C., SEPT. 5, 6, 7, 8, 9 AND 10, 1887.

ON THE CONTRACTIONS OF THE UTERUS THROUGHOUT PREGNANCY, AND THEIR VALUE IN THE DIAGNOSIS OF PREGNANCY, BOTH NORMAL AND COMPLICATED.

A Paper sent by J. BRAXTON HICKS, M. D., F. R. S., of London, England.

Fifteen years ago, the author had first directed attention to the fact that the uterus contracted throughout pregnancy at intervals of from five to twenty minutes; since then he had added much to his previous knowledge.

Before the fourth month, bimanual palpitation was necessary; later, external examination was sufficient for its detection. The pregnant uterus was very soft, and offered no appreciable resistance to palpitation, except during contraction. In a young girl suspected of pregnancy, abdominal palpitation was often all-sufficient, though internal examination might be necessary. It

* Extracts from advance slips supplied by the *Medical Record*, of New York, from its special report.

was of great advantage to obtain decisive proof before making any allusion to pregnancy. A soft condition of the uterus, with a localized lump, often pointed toward the death of the foetus or to ectopic gestation. The uterus might contract about fibroids. A knowledge of the contractions often rendered easy a diagnosis otherwise difficult, as in ovarian tumor, ovarian tumor and pregnancy, ectopic gestation and normal gestation, twin pregnancy and hydramnios (palpation and the stethoscope as aids). With a dead foetus, the walls might be rigidly contracted. We should always look for corroborative signs.

Several cases were then cited in which the diagnosis was rendered certain only by this sign. The conclusions were:

1. That the uterus contracted at intervals of from five to twenty minutes during the whole of pregnancy, remaining contracted for from three to five minutes.
2. The uterus is firm when contracted, and the foetus cannot be distinctly felt, though, when the uterus is soft, the foetus is easily mapped out.
3. By noticing the contractions, we are often enabled to diagnose normal pregnancy from other conditions.
4. The contractions have the physiological use of emptying the uterine veins of the carbonized blood.
5. The carbonized blood probably excites the contractions.

Professor Alexander Simpson, of Edinburgh, Scotland, thought the phenomenon of uterine contraction during pregnancy was now a widely-recognized fact. We often meet cases requiring all our diagnostic skill, and should employ all known means.

The sign mentioned was especially valuable before the foetal heart-sounds could be distinguished, and in the third month, when it could be employed in addition to Hegar's sign. One important result of these contractions was that when the uterus contracted forcibly, its contained blood was suddenly emptied into the surrounding parts, distending them, and thus favoring the dilatation of the parturient canal.

Dr. A. F. A. King, of Washington, D. C., said there was sometimes difficulty in recognizing the contractions of the uterus,

and they might be excited by polypi, by the retention of menstrual fluid, or by fibroids. They were principally of value after the third month. During the first and second months, we had no positive means of diagnosis. In single women, the diagnosis of pregnancy could not be certainly made by uterine contractions alone. An important point in searching for this sign was to irritate the uterus slightly to make it contract.

Professor Charpentier, of Paris, France, appreciated thoroughly the value of Dr. Hicks' sign, and related a case of hydramnios where its presence made the diagnosis possible.

VICARIOUS MENSTRUATION.

By DUNCAN C. McCALLUM, M. D., M. R. C. S., Eng., of Montreal, Canada.

After a *résumé* of the literature of the subject and the diverse opinions of modern authorities, the reader cited four cases :

1st. Mrs. W., aged thirty-eight; six children; never nursed; good health. Two months after birth of child, had molimina and vomited blood. Treated by rest, ice and gallic acid. No unpleasant after-effects and no further hemorrhage for four weeks, when she again had molimina, followed by hæmatemesis. At next period, menses re-appeared, and have been normal since. Continued good health.

2d. Healthy woman; single. On the first day of a menstrual period, was exposed to cold, and menses stopped; next day, vomited blood; no vaginal discharge; regular since, and healthy.

3d. Patient aged thirty-three; healthy. First menstruation at fourteen years of age. Soon after had scarlatina, followed by amenorrhœa until eighteen. At twenty-three, menstruation became very scanty, and was accompanied by epistaxis for six periods, when it became regular again. Recently has again become scant, and is accompanied by the epistaxis as before.

4th. Healthy woman; pregnant three months. Six weeks before, had received a severe fright. Had a profuse hæmoptysis on two successive mornings, and three days later aborted; four

weeks later, molimina and hæmoptysis, but since, normal menstruation. Chest perfectly sound; good health. In this case the ovum was killed six weeks before ovulation became established, and obstruction being offered to the usual flow, hemorrhage took place from the weakest point.

To constitute vicarious menstruation, there must be (*a*) absence of menstrual blood flow, (*b*) blood from some other organ than the uterus, and (*c*) no other assignable cause for the hemorrhage than the increased pre-menstrual blood-tension.

A hemorrhage under these conditions is truly supplementary and clearly vicarious.

Dr. Charles T. Parks, of Chicago, Ill., mentioned a case occurring in a single woman, twenty-three years of age; sick eighteen months. For four months, defecation had been at intervals of from one to seven weeks, and during this time only one ounce of urine had been passed daily. Severe fecal vomiting. No normal menstruation for two months, but at the time for the periods molimina and vomiting of pure blood. Patient was a physical and mental wreck. Exploratory abdominal incisions showed intestines filled with scybalæ. The ovaries, much enlarged, were removed. Urine at once increased to a pint daily, many scybalæ were passed, and general health rapidly improved. For two periods the patient had molimenæ and spat blood. Heart and lungs normal.

Dr. Opie, of Baltimore, Md., thought cases of vicarious menstruation rare and illy defined. He believed that when the menstrual flow was impeded, the vascular tension would seek relief at the weakest point.

Dr. Nelson, of Chicago, Ill., recalled a case where bleeding from rectal hemorrhoids occurred at menstrual periods, there being no uterine flow. The piles being cured and the cervix dilated, the menses appeared and gradually became normal.

Dr. Rodney Glissan, of Portland, Ore., in thirty-nine years, had seen three cases; in one, menstruation had been regular, but after a serious illness, hæmoptysis appeared every month, and no vaginal flow for a year, when menstruation again became regular, and the cough ceased. Now healthy.

*THE MECHANISM OF LABOR AND THE NORMAL
FORCEPS.*

By PROFESSOR T. LAZAREWITCH, M. D., of St. Petersburg, Russia.

After calling attention to the factors concerned in the mechanism of labor, and the necessity of an accurate knowledge of the mechanics of the process, he described a forceps which he had devised, having straight parallel blades, and locking with a single tenon and screw.

His conclusions were :

1. That forceps be considered as a continuation of the hand as feelers.
2. That the less the dimensions of the blades the better they could be guided.
3. That detrimental action increases with the size of the blades.
4. Convex margins should not be so thin as to cut, or so thick as to obstruct.
5. That the instrument should lock easily, but allow slight longitudinal rotation of the blades.
6. Blades should be parallel.
7. Handles designed for convenience in guiding and the avoidance of injurious pressure.
8. Should be of smooth metal, so as to be easily made aseptic.
9. That the pelvic curve was injudicious, detrimental and difficult to employ.
10. That his parallel normal forceps filled all these conditions.

Dr. Opie thought that most forceps had merit in proportion to the skill and familiarity in their use by the individual operator. It was not so much the instrument as the man. We should not try to do by mechanism what the skillful hand may execute. A properly-educated touch and hand were the best means of warding off dangers incident to the use of the forceps. He believed in the use of a moderate pelvic curve.

THE TREATMENT AND THE BACTERIOLOGY OF AURAL FURUNCLES.

By DR. B. LOWENBERG, of Paris, France.

In 1880 and 1881, I published the results of my researches on the practical nature of aural furuncles, together with the theoretical and practical applications, the substance of which can be given as follows:

1. Boils are caused by an affection from outward, viz., through the ducts of the cutaneous follicles.
2. The successive outbreak of furuncles on the same individual takes place by auto-contagion, that is, through transport of the cocci upon the skin.
3. Infection from one person to another is possible, and originates from the same process as in No. 2.

These fundamental points have led me to a plan of treatment for boils and for furunculosis in general. I shall now expose this method with regard to the furuncles of the external ear, together with the results hitherto obtained.

My course of treatment is about the same as the one formerly proposed by me for otorrhœa, that is, the use of an over-saturated solution of one part of extremely fine powder of boracic acid to five parts of strong, even absolute, alcohol. This compound I use in instillations into the meatus, to be repeated three to four times a day.

As long as a boil is not yet opened, a simple saturated alcoholic solution of boracic acid is sufficient, but when pus is already discharging, I prefer the over-saturated solution, as it deposes a certain amount of boracic powder, dissolving gradually in the pus and thus exercising a continual anti-bacterial action.

Alcohol, besides its efficaciousness against micro-organisms, is moreover destined to facilitate the penetration of the compound into the ducts of the follicles, the seat of the disease. The fatty lining and contents of these capillary canals oppose, according to physico-chemical laws, a resistance to the entering of watery liquids, while alcohol, according to its affinity to fats, easily penetrates.

Incision of boils certainly sometimes facilitates this course of treatment, but it is often very difficult to practice it just so as to divide the follicle-ducts, which seems to me the desideratum.

Cocaine, though applied upon the epidermis, often procures passing relief.

RESULTS.

An early application of the saturated solution of boracic acid in strong alcohol often arrests the boils; even in the cases where this abortive treatment should fail, the perseverant use of the over-saturated solution always stops the otherwise nearly unavoidable succession of boils, originated by auto-contagion, as I have called it (*loc. cit.*). These results seem to me of great importance, firstly, because aural furuncles are known to be extremely painful; secondly, because, according to my experience, the longer this local furunculosis lasts the greater is the tendency of the boils to form in parts situated nearer and nearer the drum, and, consequently, to prove more and more painful. These results, to the best of my knowledge, have not been obtained before my researches.

Many female patients suffer, often for years, from aural boils arising before or during each menstrual period, a fact, an explanatory theory of which will be found in my paper. In such cases, my treatment arrests these boils, or, at least, prevents their return. Nay, their formation may even be successfully prevented by a prophylactic use of this treatment begun before the catamenial epoch.

The same results can be obtained with persons who are regularly attacked by this affection in spring or fall.

BACTERIA IN EAR-FURUNCLES.

I have undertaken bacteriological researches in a certain number of cases of still unopened boils of the meatus. In each case, I first syringed this canal and then filled it for ten minutes with a lukewarm solution of bichloride of mercury ($\frac{1}{500}$). A small parcel of the pus was inoculated into agar-agar, or nutrient gelatine, and plate cultivations were made use of the whole.

I obtained the following results: The micro-organism most frequently found was staphylococcus albus, which was absent in only one case, then came staphylococcus aureus and sometimes staphylococcus citreus. Only in one case all these three staphylococci were traced together.

These results differ from those obtained by my friend N. Kirchner, from Würzburg, who only found staphylococcus albus.

THE DISTRIBUTION AND CARE OF THE INSANE IN THE UNITED STATES.

By JUDSON B. ANDREWS, M. D., Buffalo, N. Y.,
President of Section in Psychological Medicine and Nervous Diseases.

After delivering an eloquent eulogy on Dr. John P. Gray, who was the first president of this section, he said: The amount of insanity bears a close relation to the duration of the social and governmental life of the people. Dividing the country into two great belts of north and south, there is an almost regular proportionate decrease of lunacy as we leave the older settled parts of the country along the Atlantic coast, until we reach the extreme western slope.

The New England states lead with one insane person to every 359 inhabitants. This decreases until we reach the newer states and territories, with one insane person to every 1,263 inhabitants. In the seaboard states of the southern belt, we have one to every 610 inhabitants, and the extreme southern states with but one to every 935 of the population. This emphasizes the statement that the pioneers of our new settlements are the most hard and vigorous citizens, and that the feeble and dependent are left in their former homes to enjoy the comforts of the hospitals and asylums, which are the special growth of the old civilization.

New York is the first Irish city in the world, and Berlin and Hamburg are the only cities which contain as many Germans as our own metropolis. We have among the negroes in the United States one insane person to every 1,097 of inhabitants. In the negro race, the proportionate increase of insanity is far greater than in any other division of the population. From 1870 to

1880, there was an increase in the census of the colored race of thirty-four and eighty-five-hundredths per cent., while for the same period there was an increase of twenty-five and eight-tenths per cent. of the insane. The large multiplication has occurred since the emancipation from slavery and the consequent change in condition and life. The causes are briefly told—enlarged freedom, too often ending in license; excessive use of stimulants; excitement of the emotions, already unduly developed; the unaccustomed strife for means of subsistence; educational strain and poverty. Among the Chinese and aborigines there has been but a small increase of insanity. There is among them less of the refinements of civilization, less competition and struggle for place, power or wealth, and, as a consequence, less tendency to mental deterioration.

Dr. Andrews presented a list of state institutions in the United States, number of patients in each, and also the number of medical officers attached to each institution. One hundred and twenty-one asylums were represented, fifteen of these having been built since 1880. In 1880, there was 39,093 patients in these asylums. In 1886, the number had increased to 61,411, an annual increase of nine per cent. At the present rate of increase, before the end of the decennial period, we shall have 75,000 in our asylums.

Dr. Andrews next referred to the diversity in lunacy laws in the various states of the union, comparing them with the general governmental laws of Great Britain. Special accommodation for the criminal class, a highly desirable innovation, has been entered upon by two states only—New York and Illinois.

With the exception of Delaware and Vermont, every state in the union has adopted the state system of caring for the insane, and New York was the first state to erect separate asylums for the chronic insane. Asylum architecture has undergone material changes during the past twenty years, the plan now most generally adopted being that of building detached blocks of structures in different parts of the asylum grounds, within easy reach of the administration building, these to accommodate the feeble and

helpless, the epileptics and acutely maniacal patients. In many portions of the country, buildings separate and complete are joined by fire-proof corridors.

The president next outlined some of the important changes occurring in the interior management of asylums at the present time; among them, the introduction of electricity for lighting purposes, of direct radiation for heating purposes, and of natural ventilation as taking the place of the blower-fans, much in vogue in former years.

A higher medical standard is to be noted in the asylums of the United States. The medical officers are in very few cases appointed through political favoritism, and in the state of New York the civil service requirements insure the sound medical equipment of assistant physicians. Oöphorectomy is now recognized as a legitimate mode of treatment, and castration in appropriate cases has, at present, some able advocates; electricity is now being used with more intelligent knowledge of its power. Its hand-maid, massage, less powerful and less mysterious, but not less practical, has gained a position of prominence in the treatment of insanity in many institutions. The experiments in mesmerism, mind-reading and the faith-cure have led to a closer investigation in the relation between mind and body, with a result of finding, in expectant attention, a valuable and legitimate help in the treatment of mental diseases.

THE ACTION OF CERTAIN DRUGS ON THE CIRCULATION AND SECRETION OF THE KIDNEY.

By DR. CHARLES D. F. PHILLIPS, of London.

This contained a number of very interesting experiments, made with Roy's onkometer, with caffein, spartein, strophanthin, digitalin and ulexin¹. He concluded that the flow of urine is not so much dependent on the blood-pressure as on the rate of flow of the blood in the renal vessels. With regard to this point, it is necessary to remember that, although such drugs as strophanthin,

(1) Ulexin is an alkaloid from the gorse *ulexis europæus*.

producing a great increase in the *force* of the cardiac beats, yet these are very much slowed, so that it is quite possible that although the heart's action is stronger, yet the total amount of blood sent through any given organ, such as the kidney, in a given time, may remain the same. Whereas, such a drug as digitalis, producing, as it does, a rise of blood-pressure and a contraction of the kidney vessels, may cause an increased quantity of blood to pass through the renal vessels. On this view, one could find the explanation of digitalin being a diuretic, and strophanthin not being one.

Inasmuch, however, as spartein has not so marked diuretic action, we must also assume that digitalin must have some peripheral action on the secretory apparatus of the kidney.

His results were tabulated briefly as follows, in three divisions :

(A) DRUGS THAT FIRST CONTRACT AND AFTERWARD DILATE THE KIDNEY.

(1) *Caffein*—in small doses—induces in the stage of contraction a fall of blood-pressure, in that of expansion, a slight rise; during the former, the flow of *urine* may be arrested; during the latter it is always increased, such increase depending on dilatation of renal vessels.

(The possible *arrest* of secretion during the first stage is special to *caffeine*, and may be induced by large or repeated doses.)

(2) *Ulexin*— $\frac{1}{6}$ gr. greatly raises blood-pressure during the first stage (that of contraction); in the second, expansion is much greater in degree, but shorter in duration, than under *caffeine*, and is accompanied by brief but marked increase in urinary flow; the effective dose is limited by its toxic action on respiratory centres. Practically, *excess* of *caffeine* induces only the first stage; *excess* of *ulexin* only the second.

(B) SUBSTANCES THAT DILATE THE KIDNEY, BUT TO LESS EXTENT AND MORE SLOWLY THAN CAFFEIN AND ULEXIN,

are dextrose, urea, sodium, chloride and acetate, and probably all constituents of the urine.

(C) DRUGS THAT CONTRACT THE KIDNEY WITHOUT SUBSEQUENT EXPANSION.

(1) Digitalin, with *increased* secretion of urine (probably resulting from general heightened blood-pressure).

(2) Spartein, with *diminished* secretion (in health, at least).

(3) Strophanthin causes slight temporary contraction, with no marked increase of secretion.

(4) Apocynëin, similar temporary contraction, and no definite increase of secretion.

(5) Turpentine; (6) adonidin; and (7) barium chloride give similar results.

In conclusion, it seemed to him that the plethysmographic method of experimentation is a valuable one for determining the exact action of drugs on the circulation, and one that deserves more attention than it has hitherto attracted.

Dr. Murrell referred to the importance of this study of diuretics, since so little is known, comparatively, of their effects. Diaphoretics are well understood, but the action of diuretics remain to be worked out. He could not understand the points of superiority of the instrument used over Marcy's tympanum.

INTUBATION OF THE LARYNX.

By Dr. JOSEPH O'DWYER, of New York.

He began experiments in 1880, at the New York Foundling Asylum. At that time, tracheotomy was in disfavor at the asylum, because for some time its usefulness had not been demonstrated by a single recovery. The difficulty and danger of tracheotomy deter many physicians from the operation, and not a few even of the laity fail to understand how a child's suffering can be relieved by cutting its throat.

He first used a prostatic catheter introduced by the nostril. It was found impracticable, partly because the patient would remove it with the hands. The long tube suggested a short one, and its practicability was almost at once demonstrated by the construction of a tube, one end of which extended into the

trachea, while the other occupied the vestibule of the larynx, permitting the epiglottis to close over it in the act of swallowing. But what was to hold it down in place against the expulsive effort of a cough? First a bivalve form was given to its lower extremity, permitting of its expansion after introduction. But the tube was thus made a trap for fragments of pseudo-membrane. Longer tubes reaching nearly to the bifurcation of the trachea were kept in place better, but, after a cough, the long tube would be found thrown partially out of place, and had to be pushed back with the finger. A second shoulder was then added to the tube, below the expansion or head at its upper extremity. This shoulder kept the tube from being repelled, but the abruptness of its upper border made extraction very difficult.

The abrupt shoulder then gave way to a gradually tapering enlargement, which was found to accomplish all that could be desired. A tube constructed in this way, when projected upward by coughing, will slip back into position by the pressure of the vocal bands on the sloping sides, aided by its weight. This retaining swell is only made thick enough to hold the tubes loosely in the larynx, in order to permit of their easy expulsion in case of sudden occlusion by masses of pseudo-membrane too large to pass through. Owing partly to this and partly to the difference in the size of the larynx in different children of the same age, they will sometimes be expelled even when unoccupied by false membrane, and before the laryngeal stenosis is fully relieved. If it were not for this, such a tube could be indefinitely worn. A larger and shorter tube would not be expelled, but it would make serious pressure on the lining membrane of the larynx. Such a tube may be temporarily applied with advantage as a laryngeal dilator, not in ordinary severe croup, but in slow cases, where little help is required.

Intubation is apparently, but not really, a simple operation. With more than the usual dexterity and coolness, and an easy case, it will be called by the physician who tries for the first time, a very simple thing. With less dexterity and a difficult case to manage, it will be called a difficult operation.

When established, and perfected, and in common use, intubation can never be considered a satisfactory remedy, in view of the complications and the very nature of membranous croup. The first results, if good, will create enthusiasm; if bad, distrust.

In comparing tracheotomy and intubation, the question is not which will save most life in a given number of cases submitted to treatment, but which operation can be performed or will be permitted in the greater number of cases.

Dr. F. E. Waxham, of Chicago, Ill., while strongly advocating intubation, would not overlook its disadvantages. The operation is a difficult one in its performance. The soft tissues may be wounded, or the trachea perforated. It is more difficult to extract than to insert the tube. A serious trouble may ensue from the difficulty of swallowing when the tube is in place. These are the dangers. None are so grave that they cannot be overcome.

On the other hand, it has many advantages over tracheotomy. It can be done almost instantly. There is no loss of blood, no pain, no shock, no open wound with the possibility of septicæmia or erysipelas. There is no drying of mucus in the tube, and no necessity for cleansing the tube. Less attention is required in the after-treatment. Finally, we can save as large a number of adults as, and a much larger number of children than, by tracheotomy.

After presenting a series of statistics, the writer closed with the statement that intubation has been performed 1,000 times within two years, and that 269 lives have been saved from certain death.

Dr. Charles G. Jennings, of Detroit, Mich., expressed high appreciation of the labors of Dr. O'Dwyer and Dr. Waxham, and believed this method to be of great value. His own experience, however, had led him to prefer tracheotomy. His thirty-six tracheotomies had been followed by seventeen recoveries, while he had applied the tube in twelve cases without a recovery. Dr. Waxham's statistics contain about 1,000 cases, with twenty-six per cent. of recoveries. He believed that certain

operators in both operations have records far above the average, and that the successful tracheotomists have a larger portion of recoveries than the physicians performing intubation who rank as the most successful. He believed that the personal equation is an important element in considering the comparative value of the two procedures.

Although intubation possesses the advantages alleged in the papers read before the section, it remains true that tracheotomy has advantages which should not be forgotten. After an incision, the trachea is accessible for the removal of membrane and dried mucus, and direct medication by instillations and powers. Adequate nourishment after intubation is almost impossible, while there is no such difficulty after tracheotomy.

An obvious advantage of intubation is that it can be performed by many physicians who would not undertake a tracheotomy, and in this way relief, impossible otherwise, will be afforded in a great many cases. His own experience, however, leads him to urge tracheotomy in all cases offering reasonable chance of success, and to reserve intubation for the cases in which operative interference will give nothing more than euthanasia, and for those patients whose parents refuse consent to tracheotomy.

Dr. T. J. Pitner, of Jacksonville, Ill., questioned the correctness of Dr. Waxham's closing statement that the 249 cases of recovery following intubation were so many lives saved by the operation. This assumes that, that all cases of stenosis from croup or diphtheria are, without operative procedures, necessarily fatal. He did not, however, question the utility and great importance of this operation, which appears to him to be preferable to tracheotomy.

Dr. Northrup stated, in answer to questions, that in thirty-three cases he had never met the slightest difficulty in inserting the tube, and had not failed in a single case to fully and promptly relieve the dyspnoea. He had met with no accident, and probably gentlemen present had in the aggregate used the tube several hundred times and never met with untoward accidents. He

thought the only real drawback to the success of intubation lay in its interference with feeding. It is sometimes difficult to keep up full nutrition when swallowing is so impeded.

In one of his cases, the physician in charge had retired hopeless, without doing tracheotomy, and being ignorant of intubation. The child was exhausted and comatose. The tube was inserted. The child returned to consciousness. At the end of forty hours, he coughed out the tube. It was not re-applied, and the child made a perfect recovery.

Dr. O'Dwyer, in answer to questions, said that, in his opinion, statistics will be of very little value in settling the question between tracheotomy and intubation, until a very large number have been obtained. Aside from the question of saving life, intubation will be resorted to in the most hopeless cases, those in which tracheotomy would not be thought of, for the sake of securing euthanasia.

RAPID DILATATION OF THE CERVIX UTERI.

By DR. W. H. WATHEN, of Louisville, Kentucky.

The author had learned in the field of experience and observation of the bad results obtained in efforts to dilate the cervical canal by tents, or to enlarge or straighten it by incisions to cure dysmenorrhœa and sterility. He begged to call attention to the more satisfactory means of rapid dilatation with the bivalve or double-bladed dilators now in use, and especially to the substitution of an instrument of his device for Goodell's modification of Ellinger's dilator. If tents were used, he preferred the tupello to any other variety, it being less apt to cause septic inflammation than the sponge, and dilated more rapidly, regularly and better than the tangle. He referred to endometritis, pelvic hæmatocele, pelvic cellular or peritoneal inflammation, septicæmia, pyæmia and tetanus, as complications accompanying or following the use of tents, and did not believe that any good results, apparently, were permanently obtained. He claimed the two-bladed dilators are relatively aseptic, and are easily used, complete the operation at one sitting, and that the dilatation is

comparatively free of immediate or subsequent dangers. It nearly always cures the dysmenorrhœa, and often removes the causes of sterility.

He thought the results of the incision of the cervix up to the vaginal junction, or through the os internal, anteriorly, posteriorly or bi-laterally, even more unsatisfactory than those following the use of tents. He dilates the cervix in his office, without a local or general anæsthetic, to the extent of half an inch, and allows the woman to walk or ride home a few minutes after. In dilatations of from three-quarters to one inch, he gives a hypodermic of morphia and atropia, then brings the patient under the influence of chloroform before operating. He urges great cleanliness, and all means to prevent septic infection. He uses three sizes of dilators; the largest the one he devised. He explained the points of superiority over Goodell's.

In conclusion, he urged that the operation should not be performed if there is any pelvic inflammation or trouble in the tubes or ovaries; and never, in any case, until we are reasonably positive that the cause of the trouble is in the cervical canal.

Dr. A. Martin, of Berlin, said that the dilatation of the uterus as an operation had undergone remarkable changes since its origination. The instruments shown by Dr. Wathen are an improvement. The great object is to open up the internal os. The degree of dilatation may be required to be less in some cases of small cervix. It is a question whether we have not been dilating in too many cases. I would not recommend that we go back to laminaria and sponge tents.

Dr. S. H. Weeks, of Portland, Me., claimed that every case of dysmenorrhœa was not due to mechanical obstruction of the cervix. The ovaries and tubes have much to do with it, and in his experience have been oftener at fault than the cervical canal. He was surprised at the freedom from danger reported in this operation. Professor Goodell has reported 100 cases with no bad result. These instruments are not devoid of danger, and bad results may come.

Dr. C. R. Reed, of Middleport, O., thought it quite puzzling to the young gynecologist to tell what to do, the testimony being so conflicting. Some authors reported that there never had been any bad results in the few hundred cases that they had operated on; others had frequent fatalities. I have more hesitancy in operating now than formerly. We cannot predict what the result will be in a given case.

Dr. Goelet, of New York, thought that the term rapid dilatation given to the operation was a misnomer. It had come into use to distinguish it from the dilatation by sponge or laminaria tents.

Dr. Steason, of North Carolina, performed dilatation fifty or seventy-five times a year for the past ten years, and keeps his patients in bed but two days. He has never had any fever, and has not used any antiseptic, except soap and water. He uses a glass rod to keep the canal open much the same as does Dr. Goelet, leaving it there sometimes as long as a week. He did not believe in the superfluous use of so much antiseptic.

Dr. A. Reeves Jackson, of Chicago, objected to the operation, because it did not do any good—at least permanent good.

Dr. Hadley, of Australia, never uses sponges and laminaria in dilatation, which he reviewed *in extenso*. He was in favor of the old treatment.

Dr. Harf, of Ohio, recommended an original plan of his own, viz., the use of cornstalk pith. He entered his protest against rapid and extensive dilatation.

Dr. Lawrence, of Bristol, England, had used sounds constantly for years. His patients are constantly coming back. In the unimpregnated uterus, with proper precautions, this treatment can be used, but must not be left in too long. I use gelatin-coated sponge-tents, previously saturated with carbolic acid.

Dr. Wathen, in conclusion as to the question concerning his operating at his office, did it without any concern, and no anæsthetic. As to Emmett's opinion, we will concede a great deal to him in gynecology, but I do not see how he can be taken as an authority in this subject, seeing that he has not performed

the operation, condemns it *in toto*, and will have nothing to do with it. The happy medium in this, as in other cases, is the thing to follow. No one would dilate for dysmenorrhœa caused by cellulitis or inflammation. The operation can be performed to straighten the neck of the uterus, and we can shorten the neck of the uterus by dilating the cervix and without amputation.

RECENT VIEWS AS TO PATHOLOGY AND TREATMENT OF TUBERCULOSIS OF THE LARYNX.

By MR. LENNOX BROWNE, of London.

The tubercular bacilli are generally admitted as a cause of specific laryngitis. Entrance is effected through the air passages, and they are especially liable to accumulate in the upper parts of the lungs, while there is less respiratory action. The disease is usually secondary to pulmonary tuberculosis, and may be due to infection from the bacilli in the sputa coughed up, and inoculating some abraded or unhealthy and irritated portion of the larynx, or the germs may find their way thither through the lymphatic system. The bacilli, like all parasites, act as an irritant, and eventually cause breaking down of the tubercular deposits.

They must have an unhealthy or abraded surface on which to locate and thrive, and are prone to choose some weak points. Whether carried by the air, sputa, lymphatics, or general circulation, cases are recorded of infection through wounds, and teeth that have been extracted. The author of the paper quoted cases confirming the same.

The state of the health and the assimilation of food, together with tissue nutrition, have more to do with the development of tuberculosis than have locality or climatic conditions. Not only may we have laryngeal tuberculosis as a secondary infection, but we find cases where it is primary. The laryngeal symptoms may be the first to attract attention, and even become far advanced before pulmonary lesions can be detected. This is confirmed by many observers. The bacilli are recognized in the sputa; there is pain in the larynx and difficult deglutition.

The larynx presents a specific appearance. We find the infiltration, dwelling and ulcers, but still can detect no pulmonary lesion. There must have been some neglected chronic laryngitis, or some solution of continuity when exposed to these germs. Cases are reported where these local symptoms have yielded to treatment before pulmonary complications were added, and the patients were discharged apparently cured.

Treatment.—Where the general system is not broken down, or the disease advanced to the lungs, sea or mountain air and high altitudes, especially in pine regions, are of vital importance. Oxygen, pure air and the absence of germs are here more to be relied on than the thermal or climatic agents. Dr. Moore has ceased to advance the inhalation of medicated steam, but prefers oxidizing agents. Inhalations of vapor from turpentine, oil of eucalyptus and menthol he has used with success.

It is well established that tuberculosis is a blood-poison, as is pyæmia, septicæmia and the like. Germicides should be used, and benefit will result. He places great confidence in atropine, not only as a sedative, but a germicide as well. Arsenic often works in the same manner as does mercury in syphilis. So, also, do the salts of calcium, where there are tubercular deposits. The aniline treatment has not been a success, and the gaseous injection is still on trial. Experiments with sulphuretted hydrogen show temporary improvement, with diminution of the amount of sputa expectorated, less pain and less distress from persistent cough. Still the permanent benefit is doubtful. This treatment needs careful supervision, and should not be trusted to the patients or their friends. The local treatment of tubercular laryngitis gives best results, especially where systemic treatment is also employed to maintain health and nutrition. Use cocaine and employ galvano-cautery or lactic acid to destroy the deposits and induce healthy healing of the parts.

Where the infections are local, our success is in proportion to their accessibility.

Does not like iodoform or iodol dissolved in ether, as the ether is too much of an irritant; prefers a brush made with

cotton to the spray, in that it coats the surface better and is pressed into folds which are protected from the spray by the spasm of the larynx. The continued use of the spray he considers dangerous to the ciliæ of the epithelial cells. Local and systemic sedatives are emphatically called for. Insufflation is not as good as where emulsions are made with acacia, as they are apt to form cakes. Cocaine gives temporary relief, but morphia, belladonna and balsam are more permanent in their relief of both pain and cough.

The surgical measures are to scrape away the deposits with curette or forceps, under cocaine, and apply lactic acid. Do not stab or incise; it may relieve tension and congestion, but is bad in that it gives new foci for infection. For the same reason, it is better not to remove gromulerata unless respiration is seriously interfered with. Tracheotomy, for the purpose of giving rest to the larynx, is useless and worse. The larynx does not then receive the necessary air and oxygen, and bacilli-infected mucus accumulates. The cold and dry air irritates the lungs and may induce pulmonary complications. Besides, the wound may become infected. Intubation of the larynx likewise causes too much irritation and aggravates the trouble, independent of the risk of blocking up the tube; even refrain from removing elongated uvula; does not approve of recent suggestion of extirpating diseased portions.

Many apparent cures are reported, and he has had such cases himself, but is inclined to doubt their permanence; can improve condition of larynx, stop pain and cough, cause better assimilation of food, and improve nutrition. There result local relief and apparently satisfactory results, but scarcely a cure, as claimed by Schmidt, Bosworth and others.

Important Suggestions.—(1) Early diagnosis and treatment. (2) Do not be carried away with new remedies. (3) Never be too active in destroying tissue; heal instead. (4) It is better to observe facts and be influenced by the experience of many than the ideas of the few.

Dr. Sinclair Coghill, Ventnor, England, advised to treat more to alleviate pain and distress, which tend to shorten life, and

obtain as much rest for parts as possible. Look to body nutrition. He also quoted cases of primary tubercular laryngitis from infection; greatest benefit from iodoform and morphia by careful insufflation; has seen cases apparently cured. The medium or tissue in which the bacilli thrive is to him more important than the bacilli themselves; do not see parasites in vigorous tissues. Those well-nourished are not liable to infection, not local treatment alone, but improve digestion and assimilation.

Dr. J. Solis-Cohen, of Philadelphia: Sulphurous treatment improves tissues or soil, so that germs cannot flourish as well; only recalls two cases of recovery from supposed tubercular laryngitis; scraped and applied lactic acid, also used morphia, iodoform and atropia, and believed in them; condemns tracheotomy to obtain rest.

Dr. E. Fletcher Ingals, of Chicago, finds it difficult to choose between high and low altitude. High altitudes are injurious where the disease is advanced. Calcium salts are beneficial; so, also, are the chlorides. The use of sulphuretted hydrogen, in his experience, increases pain and other unpleasant symptoms, so he abandoned it. He also had poor results from lactic acid. Morphia, carbolic acid and glycerole of tannin, with water, form excellent wash or spray. Tannin aids in alleviating pain by hardening the tissues. Glycerole of tannin without water is too irritating.

Dr. Coomes, of Louisville, Ky., finds that iodoform works best, and uses it extensively for the pain by insufflation after cleansing with Dobell's solution. Whisky and water is excellent to cleanse away the mucus and ease pain so as to allow patient to eat; had a bad case where he cured larynx completely, but patient died later from pulmonary deposits; has seen a case recover, even when the epiglottis had sloughed away.

Dr. Devilbiss, of Toledo, O., used both morphia and iodoform, but with vaseline and sprayed in; considers the liquid forms of vaseline the very best medium. He uses it with iodine and iodide of potassium.

Dr. Casselberry, of Chicago, doubts the good effect of lactic acid, as it causes too much irritation, increases the cough and

does harm. Main point is to cleanse thoroughly, and use morphia and iodoform, or, better yet, iodol, which is lighter and more easily diffused. Temporary effect of cocaine is excellent, but continued use is bad. It causes reaction with congestion, increased irritation and inflammation. Morphia better, and with iodoform effect is for a longer time.

Dr. F. O. Stockton, of Chicago, Ill., has not had any success from scraping ulcers, and uses lactic acid from ten to ninety per cent. He saw a case in Vienna where there was both tubercular and syphilitic ulcerations of the larynx.

Dr. John Mackenzie, of Baltimore, is skeptical as to permanent cures, and thinks that they are more likely diphtheritic cases. He also doubts as to bacilli, with reference to cause and effect. Why will not they be caught in the nose of same individual when abraded surface? Is in favor of constitutional treatment; local treatment of bichloride, 1 to 2,000.

Dr. Curtis, of Chicago, says that atropine is of no use. Sprays the larynx with nitrate of silver, with the result of healing the ulcers.

Dr. Browne closed the discussion. He believes in the bacillary origin of the disease, but treats both bacillus and tissue as well. Note the close relation of bacillus of tuberculosis to that of lupus; must treat individual cases differently. He has had no good results from large doses of quinine, as it was not assimilated. Iodide of potash proved harmful, by causing loss of weight and interfering with nutrition. It is of benefit only in syphilitic laryngitis, which can readily be mistaken for tubercular.

LUPUS ERYTHEMATOSUS.

By Dr. A. RAVOGLI, of Cincinnati, O.

In his opening remarks, the author said that he would always prefer to treat *lupus vulgaris* than *lupus erythematosus*, so difficult was it to obtain satisfactory results. Kaposi had regarded the condition as a neoplasm. Hebra first described it as a *seborrhœa*, but modified the term by adding to it *congestiva*. All

authors mention erythema and congestion as important features. Specimens were exhibited, which showed enlargement of the epithelial cells and hypertrophy of the papillæ in the stroma of the corium, and an infiltration of inflammatory cells in the meshes of the tissues, and some cells are seen between the fibres of connective tissue surrounding the hair-follicles. There is an increase in the number of connective-tissue corpuscles. The elastic fibres are swollen and enlarged, and the loculi, formed by the fibres of connective tissue, contain fluid. The blood-vessels are filled with blood. The condition is then one not of neoplasm, but is an inflammatory process. Each layer of the skin is affected. After a patch of lupus erythematosus has disappeared, there is left a thin, white, parchment-like condition of the skin, resembling a scar.

There is a true atrophy of the skin, caused by pressure, producing obliteration of the glands, which first take part in the hypertrophy. The process is then first a hypertrophy of the histological elements, followed by an atrophy.

The cause of the atrophy is found in the blood-vessels being closed and obliterated by pressure. The primary cause consists in an irritation and stimulation of the nerves, which increases the blood-supply and causes a disturbance in the biological activity of the cells.

The author has examined scales from three cases of lupus erythematosus. The epidermic cells were found enormously enlarged, and contained a large number of round bodies which he regarded as micrococci. They formed groups and colonies, and chemical tests appeared to confirm the opinion that they were such.

Sections of the skin were made, and showed the existence of the cocci in the papillary layer most abundant where exudation had taken place, and small colonies in the interior of the fibres and in the capillary blood-vessels.

These bodies answered to the test laid down by Friedlander for micro-organisms, and Dr. Ravogli does not doubt that micro-organisms exist in lupus erythematosus, not only upon the

surface, but also within the structure of the skin. He has been unable to make any culture experiments. These organisms he regards as the cause of the disease, and instead of classing it as a neoplasm, thinks it should find its place among the infectious diseases.

The inflammatory symptoms and hypertrophy are explained by the irritation of the micrococci. The function of the sebaceous glands is increased by the irritation, hence the seborrhœa and the formation of the greasy scales. This explains lupus erythematosus discroides; in the form called *aggregatus*, the micrococci still better explain the condition.

As regards treatment, internal remedies are useless as a rule. The application of *emplastrum hydrargyrum* has been considered the best treatment. The benefit of this powerful microbe strengthens the theory. When the skin is destroyed with caustics, we succeed in destroying the cocci. When the sharp spoon was used to scrape the patches, or they were burned, the disease often returned in the neighborhood of the patch. Dr. Ravogli has obtained complete recovery in three cases of the disease by the use of ichthyol. Diminution in the secretion of the sebaceous glands is soon noticed. The reducing action of this agent is displayed on the underlying tissues. Ung. *diachyl. hebræ* goes well with ichthyol, (ten per cent.,) producing elevation of the epidermis and suppuration. The ichthyol is diminished to three per cent., and only slight scars result. He finishes treatment with ichthyol in collodion. Dr. Ravogli showed microscopic specimens to illustrate the pathological changes and the bodies which he regarded as cocci.

In the discussion, Dr. Knaggs, of England, asked if the reader considered the micrococci as causative, and whether the ichthyol destroyed them and the tissues, too, or acted as an antiseptic.

Dr. Ravogli replied in the affirmative. The ichthyol acted, he thought, by abstracting oxygen, upon which the life of the cocci depended.

Dr. Unna, of Hamburg, regarded the most important part of the paper that relating to micro-organisms, and he considered it

the weak point as well. The cocci must be seen in all parts of the thickness of the skin, and, he believed, in the sweat-glands, too. He thought micro-organisms probably existed in the disease, and would some day be discovered, but could not regard the specimens presented as showing them, and hoped Dr. Ravogli would continue his investigations and make cultures. He asked if the sections were made deep enough to show the sweat-glands.

Dr. Ravogli said he had not paid special attention to these glands.

Dr. Unna was glad to hear of the good influence of ichthyol, never having used it alone in this disease, but with the addition of salicylic acid. He has found resorcin beneficial and most useful as a varnish or collodion dressing.

Dr. Thin, of London, said that the refractive particles seen under the microscope might be micro-organisms, and might be other bodies. More characteristic stainings would be necessary, and sections carried into the deeper parts, showing the same bodies, before they could be regarded as micro-organisms. Furthermore, cultures and inoculations would be necessary to prove the case. Dr. Thin spoke of several rare cases he had recently seen in England, which, from their peculiar appearance, had been given the name of the cock's-comb disease, as similar cases had not been observed there. The feature of the affection was a raised, bright-red, uneven surface, with abrupt margins. He had examined specimens of the tissue, and had found it identical with that of lupus erythematosus. There was a greater degree of vascularity than usual, the epidermis was raised, and a dense mass of small cells was found between the rete mucosum and strata lucidum. The affection was found very unsatisfactory as regarded treatment. He related one case of lupus erythematosus in which an inexplicable spontaneous cure had taken place while the patient was upon an exclusive milk diet, prescribed for another disease. He believed in a micro-organism, but thought it had not yet been found.

Dr. Klotz was glad to hear Dr. Ravogli say he avoided stronger and caustic remedies. He preferred salicylic acid

combined with soap-plaster. He thought the discovery of micro-organisms would bring lupus erythematosus into closer relationship with lupus vulgaris, from which it had been too far alienated.

Dr. Zeisler, of Chicago, thought the micro-organism theory a very plausible one; still, it was only a theory. To prove them, it would be necessary to make cultures and inoculations. He did not regard the studies in this direction as entirely new, as Morrison, of Baltimore, had made similar investigations. Lupus erythematosus of the mucous membrane is an extremely rare condition. He had observed it in Vienna, in a case in which the mucous membrane of the mouth was affected. It presented a whitish condition of the membrane, the tissues were hardened, and it proved very obstinate under treatment. Caustic nitrate of silver was alone found to influence the condition. He agreed with Dr. Unna as to the value of resorcin, and that ichthyol had little effect. A ten per cent. solution of resorcin in collodion had acted well.

Dr. Robinson, the President, spoke especially in regard to the microscopic specimens. He agreed with Thin and Unna that in all probability a micro-organism exists, but he does not think that Dr. Ravogli has pursued proper methods, nor do the specimens show the bodies to be cocci. It is not clear that they are not extraneous matter. We must exercise great care in placing importance upon micro-organisms found upon the surface. He urged Dr. Ravogli to follow up his investigations, and thought something might come of it.

In closing, Dr. Ravogli said that he labored under difficulties in making his demonstrations at this time. He considered the test with caustic potash a convincing one, as it never attacked micro-organisms, but did attack everything else. He was glad to hear the opinion of so many that micro-organisms probably existed. He would not say positively at the present time that they were causative, but would wait until he had been able to make cultures, etc., as suggested.

Miscellany.

WHAT PROMINENT MEN SAY OF THE CONGRESS.

Dr. N. S. Davis said to a representative of *The Medical News* on Thursday evening, in reply to the enquiry whether he thought the Congress had been a success, that, in point of numbers, it stood second, if not first.

“But as to its character and the scientific value of its work?”

“Well, I have seen all the presidents of sections to-day, and they each and every one of them report most favorably.”

“From your experience of previous congresses, do you think there was a conspicuous absence of distinguished foreigners—such men, for instance, as Paget and Gull, and Pasteur and Verneuil, and Virchow and Lister, and others whose names are known all over the world?”

“Yes, that is so; but then you must remember that many of those you name are over seventy years of age, and at their time of life, and with their professional duties, a journey across the Atlantic, and such a prolonged absence as is thereby implied, is a very serious matter. Sir James Paget himself told me that he feared he would be unable to attend on account of his advancing years. Professor Virchow wrote me that he could not come, because of an important conference to be held in Berlin this month, of which he is chairman of the committee of arrangements. I do not remember exactly what that conference was, but it was something combining hygiene with some other subject.”

“But what about Neudörfer and Lutaud, of Paris, who were to have been here and to have taken part in the proceedings?”

“Neudörfer is detained by sickness; and Lutaud—well, I can’t say anything about him.”

“Then, on the whole, do you think the delegates compare favorably with those of other congresses?”

“Yes, I think so. They are younger men, true, but I understand some very valuable papers have been contributed even by those who did not come. M. Simon, for instance, a very eminent man I am told, has forwarded a most important paper. And you must remember we have had difficulties with regard to the foreign delegates.”

“What were those?”

"I do not care to go into them, but, gentlemen—you could count them on the fingers of your two hands—have written and begged foreign delegates not to come. They said there were factional differences. They even went so far as to say that Washington was unhealthy; that the weather was very hot, and that typhoid fever was prevailing. Of course, this kept some away."

"How do you think the American reputation for hospitality has been maintained?"

"That I would rather say nothing about. I have heard many complaints from the foreign delegates that they were not able to get into the White House to see the President and Mrs. Cleveland last night—many such complaints. It was unfortunate, very. I am very sorry it occurred."

"Is there any prospect, do you think, that the Congress will ever meet in the United States again?"

"Not for twenty years at least. These sessions are only triennial, and it is not likely that Washington's turn will come round again for twenty years—if then."

Secretary-General John B. Hamilton was asked how many delegates have registered.

"Over 2,600."

"How many foreigners?"

"Three hundred, it is estimated, but I have not the local registration-book at hand."

"Have you been cramped for want of money?"

"Yes."

"If the dissensions beginning at New Orleans had not taken place, do you think there would have been a larger contingent of foreign delegates?"

"If there had been no system of general misrepresentation practiced by many of those who resigned, and followed up by personal solicitations to stay away, the attendance might have been larger; as it is, the attendance from transatlantic countries is larger than it was at former congresses."

"Do you know of any dissatisfaction having been expressed by foreign delegates as to their treatment here?"

"No, on the contrary; see Sir James Grant's speech to-day on this point."

"What do you think of the scientific aspects of the Congress?"

"They are entirely satisfactory, and will take rank with any former congress. I can only view with contempt the statements made with evident intent to disgrace America and belittle our guests."

"What about the absence of those American physicians who withdrew from the Congress and remained away?"

"While their absence is to be regretted, yet the facts show the Congress is entirely successful without them."

Dr. Unna, of Hamburg, being asked "What opinion he had formed of the Congress?" replied:

"I do not think it is of as high a character as those of Copenhagen and London. The discord at home has prevented many foreigners from coming. This discord was so prominently heralded abroad that it became in a measure international. If it had not occurred, many Germans would have come, not thirty or fifty, but 200. This number would have included the most prominent men of the country. I regret that the leading physicians of America did not overlook the discords when it was too late to reconsider action, and so give to the Congress more of the air of being international. Men like Agnew, Loomis and others are much missed. My strongest impulse in accepting the vice-presidency, and reading a paper, was to prevent the Congress from dwindling into simply a national affair. I regret that others did not take the same view. The scientific aspect, although not equal to former congresses, is better than was to be expected under the circumstances. Papers in the dermatological section were good for the most part, but the discussions were poor; but such is the case at all congresses. Socially, I have not had much personally to complain of, although I am aware of many deficiencies. I know that many errors have been committed. The arrangements have been poorly announced. On the whole, there is much that is to be regretted."

Dr. W. T. Lusk, of New York, was asked what opinion he had formed of the Congress.

He replied: "I have heard some complaints from foreign delegates regarding a want of courtesy on the part of the officers of the Congress. It seems there has been some want of business management, and, perhaps, a lack of experience on the part of the officials in managing such affairs. They have been too much disposed to regard the

foreigners as they would our own people, who are always willing to look after themselves, while a European seems to require some one to take care of him."

"What do you think of the scientific value of the Congress?"

"I believe the volumes of transactions, when published, will be equal in respect of the papers contained therein to those of any preceding congress."

"If the unfortunate dissension which began at New Orleans had not occurred, would not the success of the Congress have been more marked?"

"Well, I must say the presence of prominent members of the profession at the discussions was greatly missed."

Dr. Lusk, who was somewhat unwilling to give his views for publication, also stated that he thought that in the division of papers between the sections of obstetrics and gynecology, the former had been unfairly treated by being deprived of several papers properly belonging to it. For instance, a paper on Cæsarean section, and another on extra-uterine pregnancy, had both gone to gynecology, instead of to the proper section—obstetrics."

Dr. Marino Semmola, Professor of Therapeutics in the University of Naples, Italy, was asked his opinion of the present Congress, and replied to the queries addressed to him as follows:

"You have attended other congresses?"

"Yes, indeed, I think I have attended every one."

"What opinion have you formed of the scientific value of the Congress?"

"It is considerably below the average of any of its predecessors?"

"Do you think that if the unfortunate dissensions at New Orleans had not taken place, that a larger number of distinguished men from Europe would have attended this Congress—such men as Porro, from your own country, and Pasteur, Virchow, Esmarch, Paget, MacCormac, etc.?"

"I have met many, if not all those gentlemen, at preceding congresses, and have no doubt at all that if there had been no quarrel among the profession here, some, if not all of them, would have crossed the Atlantic."

"How did you happen to come yourself?"

"I was assured that the quarrel was a matter that had entirely passed over, and so I came on."

"Have you met many of the Americans whom you expected to see?"

"Very few, indeed, and it is a matter of sincere regret to me?"

"How have the social aspects of the Congress appeared to you?"

Dr. Semmola smiled at the question, shrugged his shoulders, and said: "Well, I have had one or two private invitations, but as for the rest—it does not exist."

"You are not favorably impressed, then?"

"No; how can I be?"

NOTES AND GOSSIP ABOUT THE INTERNATIONAL MEDICAL CONGRESS.

The total registration of members of the Congress up to Wednesday was a little rising 2,500, including about 110 foreigners. As the registration is carried on by letter as well as personally, this is not an exact representation of the actual attendance. Making due allowance for this fact, it is probable that the real attendance is something over 2,000. There are some noteworthy facts in this regard. There are very few New England physicians, a very small representation from New York and only a part of the Philadelphia men. Some of the Canadian representatives, naturally more familiar with eastern men, lament the absence of many whom they expected and were especially desirous to see. The foreign delegation includes not many men of note. Among the best known are: Dr. Leon Le Fort, of Paris, surgeon at the Hôpital Necker; Prof. Unna, of Hamburg, Germany, editor of the *Journal of Dermatology*; Dr. Joseph Kaposi, of Buda-Pesth, Hungary, director of the Hungarian Bureau of Medical Statistics; Dr. T. Graily Hewitt, of London, the well-known gynæcologist; Dr. Mariano Semmola, of Naples, Italy, a senator in the Italian Parliament; Dr. Apostoli, of Paris; Grant Bey, of Cairo, Egypt; Dr. A. Martin, of Berlin.

Among the exercises of the first day was the election of an enormous list of vice-presidents, prepared for the occasion, most of whom were probably at home. A delegate made a courageous attempt to interrupt the cut-and-dried programme, and to confine the officers to those in actual attendance, but he was promptly and effectually sat upon by the president.

The disadvantages attending the assemblage of a large body of men in a Democratic city, without proper arrangements, have been

markedly illustrated. In the first place, it is stated in the Washington papers that there were between 4,000 and 5,000 people at the gathering at the Pension Hall on Monday evening. As the total registration at that time did not exceed 2,000, it may easily be computed how large was the proportion of outsiders. The next night, at the President's reception, the same spectacle was seen of non-members of the Congress thrusting themselves into a place not designed for them. This was carried to such an extent that many of the foreign guests came and went without seeing the President, unable to obtain entrance without long waiting. The upshot has been, that it was announced at the session of Wednesday that it was feared that tickets to the banquet of Thursday had been improperly obtained; and it was, therefore, decided to cancel them and issue new ones.

There is a wide difference in the programmes, and interest of the various sections, and the attendance upon them. For instance, the section devoted to military surgery runs over with papers, and has a definite programme, which is carried out so far as time will allow. The sections on general surgery, gynæcology, diseases of children, and others, perhaps, are well attended and evoke spirited discussions. The section on general medicine is pretty much a failure. There is no regular programme, the promised papers are few, and those that materialize are fewer yet. The morning sessions of this section have been given up for lack of papers and attendance. This may partly be attributed, perhaps, to an essential lack of interest in the subject itself. As a Canadian physician put it, "We are all now surgeons or specialists; we stick to the rectum or what not,—we are no longer doctors."

THE *Boston Medical and Surgical Journal* says: "A reasonable verdict as to the Congress seems to be that it was, considering the circumstances, fairly successful, and no more. The gentlemen who came from abroad had a right to expect to come to a representative American gathering; and this they failed to find. Sectional, as regards residence, scant in men of recognized professional eminence, the American contingent of the Congress was a body of very worthy family doctors. The whole registration, by the Secretary-General's count, was 2,700, which means an actual attendance of between 2,000 and 2,500. The number of foreign members was not far from 150;

and of these there were but few of wide fame. As to the papers presented, quantity, not quality, seems to have been the rule. Instead of the two papers a day before the general session, which should have been the marked features before the Congress, lack of material reduced them to one daily, and of these, one, in the author's own words, was written merely to be read before a section. The address of the President of the Congress fell heavily upon the listening ear. There were, doubtless, among the sectional papers some that were worthy of preservation. Time alone will sift the big wad of documents which ambitious young men of inexperience combined with respectable practitioners to accumulate; but it is believed that the world would weep at the loss of few of them. There inheres, of necessity, in every gathering of the sort a wonderful power of attraction for cranks and wind-beaters; and there was no lack of these among the authors of papers or among those who discussed them. In certain sections, like that on gynæcology for example, where were present eminent men from abroad, (attracted, it may be, by the meeting the succeeding week of the American Gynæcological Society, to which they had been specially invited,) discussion meant more than mere words. But this could not be said in all cases.

As a means for the advancement of science, the success of the Congress was questionable.

So far as the local arrangements were concerned, the job appeared to be too big for the committee in certain directions; at least, the chairman of the committee expressed publicly his dissatisfaction with his own arrangements in as strong terms as did any mere member of the Congress.

The charm of the weather, the beauty of the city, the courtesy shown the Congress by the Chief Executive of the country, all favored the gathering. What it might have been under proper auspices, can be imagined.

Selections.

ETIOLOGY AND DIAGNOSIS OF NYMPHOMANIA.

By C. H. F. ROUTH, M. D.

Dr. Magnan divided sexual anomalies into four groups—the *purely spinal* cases; the *posterior cerebral spinal*; the *anterior cerebro-*

spinal, and the *anterior cerebral*, or physical cases. [A translation of Dr. Magnan's paper can be found in the *Med. Abs.*, page 121, 1885.]

The writer mentions the case of a woman, aged seventy, the reverse of lustful, and yet defecation produced such sexual excitement that she was compelled to masturbate. She was cured by clitoridectomy. The second case was that of a high-born lady, thoroughly respectable in every way. The moment a part of the vagina behind the urethra was touched, the most violent excitement was induced. In a third case, there was a fibroid tumor and adherent left ovary, the same unnatural excitement followed the moment the ovary was touched.

As the author is considering the subject specially from a medico-legal point of view, his remarks chiefly concern the third class—*anterior cerebro-spinal* cases. In these cases, we can observe five characteristics: 1. There is a strong neurotic hereditary history. 2. They are, for the most part, agreeable, interesting, if not beautiful women, and have very special physical conformations. 3. They are intensely vain, and open to adulation. 4. There is generally some uterine or ovarian complication, and they are frequently masturbators. 5. They are indubitably the most decided liars in creation, yet they are under the firm delusion that they are speaking the truth all the while. The knowledge of these five peculiarities will often enable us to diagnose this pitiful condition, and both to remedy the disease and avoid any personal risk to ourselves.

These women are generally either very good-looking, or, at least, very interesting in their appearance; full of sympathy in their manner, having strong affections, and generally attractive to men because of their effeminate appearance. In social life, they are eminently agreeable, desirous to please, often the nicest young women in society; full of romance and fantastic longings. The pupils are generally much dilated, the eyes themselves exceedingly bright, furrowed and black under the eyelids, and they know well how to use them. When under the influence of any intoxicating drug, such as chloroform or inebriating drink, they very often, by their conversation before they go off completely, or the manner in which they conduct themselves upon the bed, betray the exalted state of their sexual feelings, and they will sometimes let out, while they are under this influence, sudden statements which will lead you to fear that they are anything but what they have appeared to be. Occasionally, on awakening out of this sleep, when they resume their faculties, they are under the impression

that you have done something to them which was either immodest or immoral; and this is the more remarkable as they have all the while been surrounded by spectators, male and female, before whom any such imprudence could not have been committed. These are not necessarily bad women, impure or unchaste.

A girl about seventeen desired me to remove some needles from her body, which, she asserted, she had swallowed. She was very vain, thought herself extremely handsome, and that her form was quite that of a Venus. The first time she came to me I found three needles in her bosom, which I withdrew with some pain to herself. The next week the needles were lower down, about the umbilicus. Now there were four or five stuck in nearly the whole length, having just the head outwards. This led me to suppose that they must have been inserted from without; the third week she came to me with several needles in the lower part of the belly, about the pudenda. I at once came to the conclusion that these had been inserted by herself externally, with a view to display what she thought were personal attractions. On removing these, I cut her rather deeply, and I never saw her from that moment. This girl I had every reason to believe was a *virgo intacta*. One other case was that of a German lady—highly diseased, congestio uteri vaginitis, strong neurotic symptoms—in no way attractive as far as face, at least, was concerned, and, so far as I knew, thoroughly chaste. I found her in bed. To my surprise, she suddenly uncovered herself and I saw she was nude. I remonstrated and chided her. "Oh!" she said, "I only wished you to see how beautifully formed I was." This lady, a few months later, went stark mad, and is at present somewhat peculiar. It is extremely dangerous to treat such women harshly, but it is quite possible not to offend their vanity, and yet reprove them kindly.

The condition cannot always be made out in very young women; but past the age of twenty-six, if the habit has been continued for a long period of years, the symptoms of this habit will be very clear. First, the internal labia are extremely developed, projecting considerably beyond the external. Sometimes one internal labium projects extremely, generally of the side to which they are handled—and I have known a labium so long as to hang like the tongue of a bulldog.

When these internal lips are turned outwards on the under surface, an appearance very like psoriasis is seen—patches of bright shining scales, always dark, within the labium. It is sometimes, if a woman

be very dark, nearly black. The clitoris is generally swollen and enlarged, or hard and small, and it cannot be pressed upon without making the woman jump, which is a symptom of its extreme sensibility. Inferiorly, the fourchette, instead of projecting as it does in young children and women, is hollowed out, as if concave, while the hairs for the most part have lost their curly character. There is, moreover, between the internal labia and clitoris, a white offensive secretion, not unlike that which would be produced by filling the crevices with white powder. When a vaginal examination is made, there is generally partial prolapse of the uterus, which may be within two or three inches of the external orifice. There may be or may not be redness of the organ, but there always is more or less leucorrhœa. I should remark here, if there be any syphilitic taint in the woman, there is much more hypertrophy apparent in these parts. These symptoms or signs may be present in other diseases of these parts, accompanied with great pruritus, as perhaps in some cases of diabetes and lupus, but I think as a whole they pretty accurately denote imprudent habits.

They are indubitably the most decided liars in creation, and yet they are under the firm delusion that they are speaking the truth all the while. This propensity seems to influence their whole nature. There is scarcely anything, never mind how absurd, which these women will not do or say to obtain sympathy or notoriety. It is also a curious phase in this disease, that like an epileptic or hysterical seizure, it seems to instigate other women to covet similar notoriety; and wheresoever a man is accused by one of these women, others will start up suddenly and make similar charges against the same man. This occurred, during the last few months, in two cases where medical men were cruelly accused.

The manner in which some women will simulate phantom tumors, by partial contraction of the abdominal parietes, is very remarkable. It shows their pertinacity in a purpose, for such contractions must be acquired after long practice. I had such a case, where the patient could put the liver against the abdomen so that any percussion gave full indication of a large tumor.

A young lady in a very good station of life charged three gentlemen with having ravished her. An examination found the clitoris very sensitive, and covered with a white secretion like moist fuller's earth; hymen intact, just admitting the little finger. This woman subsequently made overtures to some railway porters, and was placed

in an asylum. A woman, past seventy, claimed to have become pregnant from some matter left on the seat of a w. c., where a man and woman had been together. A hospital nurse accused a house-surgeon of having ravished her while she was sleeping in the ward, her bed being between those of two other women. A married woman was in the habit of visiting medical men for pretended uterine disease. Her object was to tempt them to some indiscretion, with the purpose of accusing them to her husband.

The above cases will suffice to show the insane features of these hysterical cases. They bear a very close relation to those cases of nymphomania which are admitted to depend on actual disease of the brain. Let me refer to one or two of such instances.

The late Mr. North related the case of a lady, a great sufferer. He always visited her in the presence of her mother; but on one occasion, the mother being engaged, she begged him to go up and see her daughter. No sooner had he got into the bedroom, and she became conscious that the mother was not accompanying him, than she instantly exposed the whole of her person. He kindly rebuked her. She turned around to him and said, "Doctor, you do not know the agony which I endure every day from the passions that devour me." She was dead in three days.

Another instance was that of a charming lady who had lived in the family for fifteen years, and was much beloved. All her life-time she had been most devoted, a model of everything that was pure and holy. The poor girl became very ill, seized with marked hysterical mania. As there was a strong tendency to suicide, she was never left alone, but different members of the family used to watch by her bedside. At last the practitioner offered to sit up with her for one night. After all the family had gone to rest, she at once opened her mind to him, and urged him to have connection with her, which, of course, he refused. Three days after, that poor girl was a corpse.

It was but the other day that a married lady, also a model of everything that is pure and modest, told me that she sometimes suffered from such agony and excitement in the sexual organs, which lasted for not one hour, but four and five and six at a time, that if she were not kept back by strong religious feeling, she would have run into the streets and got hold of the first man she could find.

A highly neurotic and hysterical, but very engaging, young lady was a patient of mine for some months for very obstinate uterine dis-

ease. She was intensely attached to a gentleman who visited her occasionally, and I have every reason to know she had often yielded to his embraces. Sometimes, however, the violent revulsion of feeling she displayed to me, when speaking of him in the most violent terms of hatred, was very remarkable. She was a woman, clearly, of very strong passions, which, at times, had the complete mastery over her. She charged her own brother with having entered her room at night and ravished her. She afterward developed suicidal mania, became very violent, was placed in an asylum, and died in a week.

These nymphomania cases manifest how completely and entirely these diseases have their origin in the nervous centers, and they are often fatal. Now I believe that, in many instances, women who bring forward false charges against medical men and others, could, if cognizant of their tendency, and willing, completely restrain themselves. But, to a certain degree, it is a pleasurable excitement, and, like an ordinary hysterical fit, if it is allowed to go beyond a certain point, then it becomes absolutely uncontrollable. The *lying* propensity then, especially, gets beyond all their powers of repression; the desire for sympathy, notoriety and pity becomes morbidly strong, and they care not any more than the most undoubted maniac if, by indulging in the gratification of their passionate excitement, they injure or destroy irrevocably a man's character.

I know of a case of a young lady who, in after-life, under the power of a strong religious conviction, confessed to me that the statements made to me and others over a series of years, and the symptoms so terrible which she told us she was suffering from, were not only and often greatly exaggerated, but palpable falsehoods. When she had reached a certain point, then she could no longer restrain herself. Her powers of mendacity knew no bounds. Indeed, had she been devil-possessed, she could not have spoken then more falsely.

If these data are correct, how are medical men to comport themselves when investigating the diseases of these women?

First, whenever anything like a suspicion exists in our mind that we are dealing with such a woman—and I think that we can very often get this from the surroundings—then we are bound to exercise the utmost caution and prudence.

Secondly, the examination the first time should be as brief as possible, especially any local one of the sexual organs. If again required, we should absolutely refuse to examine except in the pres-

ence or in the neighborhood of a third person, who may be called in at a moment's notice. I once adopted this plan with a certain lady whom I shall call Mrs. A., whom I was led to suspect. She had confessed to having had unnatural relations with very near relatives. She had also once been an inmate of a lunatic asylum. I had treated her and cured her of a troublesome uterine affection in past years. Once she brought me a lady, whom I shall call Mrs. B., to treat also for uterine disease. I did so, and she got well. One day, Mrs. B. informed me that Mrs. A. had charged her with criminal connection with myself, and cautioned me to beware lest she should charge me of like misconduct with herself. Anything like severity or angry outbursts against such women is a great mistake. We are not dealing with thoroughly sane women. Kindness in our manner, at the same time as firmness in our demeanor, is the most prudent course. Wives of Potiphar exist also in the present day even among hysterical women.

So far, as regards our own personal relations with these women ; but as medical jurists we must insist upon a full and complete examination of the woman herself, historically, physiologically and locally, and this examination should be made in consultation with a medical expert on the side of the defendants. It is not enough to see if she has been outraged or not ; the signs of rape should be certainly unequivocal. But is she addicted to masturbation ? Has her mind been deteriorated by prurient ideas ? These peculiarities are seldom, if ever, noted. Juries and judges are completely ignorant of the tendencies of such women, and yet these tendencies are the keys to the whole situation.

As medical jurists, we should never forget the abominable powers of mendacity of these women. Except upon the strongest corroborative evidence, the presumption is they are *liars*, plausible *liars*, cunning *liars*—liars not necessary from ill-will or even free will, but from disease. This peculiarity is, perhaps, less understood by judges and juries, and even counsel, than the prurient habitudes of these women.

I trust I may be excused for having dwelt at such length upon so painful a subject. But it is because it is so painful, and fraught with so much danger to each one of us, that it should be fully discussed.—*Medical Press, London—Medical Abstract, N. Y.*

Editorial.

MEDICAL EDUCATION IN AMERICA.

The importance of this subject, and its continued disregard, compels us to write very frequently upon it, but we are not without hope that before many years the thoroughness of medical education in America will be equal to that demanded in Europe.

In no other country in the world has the medical profession assumed such formidable proportions as in the United States. In the infant republic of France, one physician is deemed sufficient to care for the physical ills of 4,000 inhabitants; in Germany, there is one doctor to every 2,000 inhabitants, but in our land of light and progress there is one physician to every 600 people, and in our great metropolis there is said to be a doctor and a-half to every tax-payer. A hundred American medical colleges are engaged in the noble occupation of manufacturing doctors. These colleges not only supply a demand according to the usual economic law, but demand a supply, and get it—such as it is. The size of the profession has far more than kept pace with the increase in population; but its respectability has varied inversely with the mass. Granting that some of the world's greatest physicians and surgeons have been produced in America; granting that the country has done its full share in farthing the onward march of medical discovery—still the vast numbers of ignorant quacks who have been licensed under the auspices of the government and tolerated by the community, are no credit to the profession or the nation. Many young men who are too ignorant to succeed in the law, too lazy for manual labor, or too immoral to join the clergy, think that they can gain a comfortable and respectable livelihood in the medical profession, where deception is so easy and ignorance so readily concealed.

Our present system of medical education is largely to be blamed for the unfortunate condition of the profession. The

incompetency of law-makers, the ignorance of the people, and the carelessness even to perversity of the more respectable portion of the profession itself, are all to be arraigned. Rural statesmen and Bowery politicians are not competent to make laws regulating the practice of medicine. This should be entrusted to, or at least supervised by, men who understand the true requirements of the profession. If this were done, there would be no more "Dean Buchanans," no more "doctors" turned out from a medical college complete in nine months, having about as much knowledge of their *alma mater* as they acquired in the womb of their *vera mater* during the same length of time.

There once existed "The Central Medical College of Rochester." The faculty in this remarkable institution were the students—the students, the faculty. At the close of a short and comprehensive course of study, the faculty conferred degrees upon themselves, and some are practitioners in our midst to-day. While the church takes an interest in the clergy, and the State educates the teacher, the training of physicians is left to the enterprise of stock companies and private individuals. The seven men who constitute the faculty of many medical colleges are at once proprietors and professors, just as much as "Mr. Squeers" was both principal and proprietor of "Do-the-boys Hall." In other countries, no university is complete without its medical department. Chairs of anatomy and surgery are endowed, as well as those of homiletics or ethics; but in America, there are not a dozen medical schools that have any real connection with a university. The professors are entirely dependent upon the fees of the students for their salaries, and are, therefore, naturally more interested in the quantity than the quality of their graduates. The rapid increase and defective management of medical schools has tended to cause a backward movement of the standard of education. "Over one hundred years ago," says Dr. Roosa, "when the medical department of the University of Pennsylvania was established, it was the intention of the founders to have as liberal and

extensive a plan of education as the oldest European universities." A thorough literary and scientific education was a pre-requisite to admission, and only after a three years' course was the degree of Bachelor of Medicine conferred. This was at a time when medical science, compared with that of the present day, was in its infancy. Pathology, histology and a score of subordinate branches of medicine have since come to light. Physiology has been revolutionized by the microscope and modern discoveries in physics. *Materia medica* has been enriched by the advance in chemistry; but instead of increasing the requirements for admission to our colleges, and extending the period of study in the great majority of schools, no preliminary education is required, and the period of study has in some cases actually been shortened. Only four per cent. of American medical students have literary or scientific degrees, and but two and a-half per cent. of the licensed practitioners are college graduates.

The methods of instruction in the majority of our medical colleges is radically defective. When there is no graded course, as is usually the case, the physician pursuing post-graduate studies, the advanced student and the novice who does not know a vein from an artery, may be found seated in the same lecture-room. The science of medicine has passed the stage when men gave long discourses on the probability of Adam's having had an umbilical cord, or the possibility of spirits existing in a vacuum. A practical training is what is needed; actual contact with disease in hospitals and dispensaries; personal work and research in laboratories, and lectures only to explain relations and weave isolated facts into one harmonious whole, is what is required. This would be far better than the present system of compelling students to listen to lectures five or six hours a day, as if they were expected to absorb the art of medicine from the seats of the lecture-room.

THE AMERICAN GYNECOLOGICAL SOCIETY.

The twelfth annual meeting of the American Gynecological Society, held in the Academy of Medicine, New York, on the 13th, 14th and 15th days of September, 1887, will long be remembered as a most notable gathering of medical men. Following, as it did, so close upon upon the International Medical Congress, held in Washington the previous week, it naturally attracted the attendance of the most distinguished gynecologists who were at the Congress, and who had been especially invited to attend this meeting in New York.

Among the noted foreign visitors were: Dr. August Martin, of Berlin; Dr. A. Cordes, of Geneva, Switzerland; Dr. George Granville Bantock and Dr. Grailly Hewitt, of London; Dr. Lawrence, of Bristol, Eng.; Dr. Apostoli, Dr. Terrier and Dr. Doléris, of Paris; Dr. Alexander R. Simpson, of Edinburgh; Dr. George H. Kidd, of Dublin; Dr. Balls-Headley, of Melbourne, Australia; and Dr. P. G. Unna, of Hamburg. Drs. Bantock, Doléris and Apostoli read papers, and most of the others took part in the discussions.

The Society was fortunate in having for its president at this time, Dr. Alexander J. C. Skeene, of Brooklyn, a genial gentleman and an accomplished presiding officer, under whose guidance the work was so expedited that the entire programme, a long one, was finished at the appointed time.

To Dr. Fordyce Barker was assigned the pleasing duty of welcoming the Society and its guests to the hospitalities of the occasion. Fit man, fit task. No one to-day can be more truly said to be a representative of American medicine than Fordyce Barker. His years sit kindly on his graceful physique, and his fluent, finished, classic English is always delightful to the ear. The scientific work done at this meeting was of an exceptionally good quality, embracing, besides those of the foreign members already mentioned, papers by Drs. Emmet, Busey, Polk, Mundé, Palmer, Hunter, Jackson, Chadwick, Battey, Johnstone, Parvin, Van de Werker, Foster, and Jewett, together with the annual address of the president, which was of more than ordinary interest.

The social part of the entertainment included a reception by Dr. Fordyce Barker on Tuesday evening, luncheons at Delmonico's on Tuesday, Wednesday and Thursday, at one o'clock P. M., and the annual dinner of the Society, also at Delmonico's, on Thursday evening, at seven o'clock. The luncheon of Wednesday was given by the New York Obstetrical Society, upon its special card of invitation. The members and invited guests, both American and foreign, were present for the most part on these several occasions. The mid-day recess, from one to three o'clock, passed in such pleasant companionship, served to promote acquaintance and strengthen friendships, which cannot prove otherwise than beneficial to all the fortunate participants of these bounteous hospitalities.

In addition to the regular programme, an opportunity was afforded several of the gentlemen present to witness laparotomies, Alexander's operation, etc., at Bellevue hospital, through the courtesies of the operators, Dr. W. Gill Wylie and Dr. Wm. M. Polk.

The Society did itself honor in selecting Dr. Robert Battey, of Rome, Ga., as the president for the ensuing year, a guaranty of efficient and conscientious continuation of good work. It negotiated the proposition to become a part of the American Congress of Physicians and Surgeons. For the successful carrying out of an elaborate schedule of great scientific and social interest and value, too much praise cannot be awarded Drs. Mundé and Lee, the indefatigable executive committee, whose great glory must be the memory of the meeting of '87.

*BUFFALO LAW SCHOOL—LAW DEPARTMENT,
NIAGARA UNIVERSITY.*

The opening of the Buffalo Law School occurs on Monday, October 3d. All students are requested to report on Saturday, October 1st, at ten o'clock A. M., at the Law School lecture-room, in the building of the Medical Department of the Niagara University, on Ellicott street, opposite the Buffalo Library, for the purpose of examination and registering.

The formal opening of the school will be held on Monday evening, October 3d, at the lecture-room in the Buffalo Library, at eight o'clock. Hon. Charles Daniels, LL.D., dean of the law faculty, will deliver the principal address. Citizens, generally, are invited to be present. The hours of instruction will be in the morning of each day, from nine to eleven o'clock. Moot courts will be held on Saturday mornings. The course of instruction will be substantially as follows:

FOR THE JUNIOR CLASS.

Contracts and Private Rights—Leroy Parker, three hours each week for the entire year: Tuesdays, ten to eleven, Wednesdays, nine to ten, Thursdays, ten to eleven.

Practice in Civil Actions—Charles P. Norton, three hours each week for the entire year: Mondays, ten to eleven, Wednesdays, ten to eleven, Fridays, nine to ten.

Property—Spencer Clinton, Tuesdays, from nine to ten, fifteen weeks. Mr. Clinton will be supplemented by a course on real estate. E. L. Parker, Tuesdays from nine to ten, fifteen weeks.

Theory of the Codes and Codifications—John G. Milburn, Mondays, nine to ten, ten weeks.

Criminal Law and Practice—Tracy C. Becker, Mondays, nine to ten, fifteen weeks.

Torts—Hon. George S. Wardwell, Thursdays, nine to ten, twenty weeks.

Law of Corporations—Charles B. Wheeler, Fridays, ten to eleven, ten weeks.

Wills and Estates of Deceased Persons—Hon. Jacob Stern, one hour each week: Thursdays, nine to ten, ten weeks.

Marriage and Divorce—Lecturer to be hereafter announced, one hour each week: Fridays ten to eleven, twenty weeks.

SENIOR YEAR.

Evidence—Adelbert Moot, one hour each week; Mondays, nine to ten, twenty weeks.

Equity Jurisdiction—Hon. Charles Beckwith, one hour each week: Wednesdays, nine to ten, fifteen weeks.

Mercantile Law—Leroy Parker, two hours each week for the entire year: Mondays, ten to eleven, Fridays, nine to ten.

Corporations—James Frazer Gluck, one hour each week: Wednesdays, ten to eleven, fifteen weeks.

Medical Jurisprudence—Tracy C. Becker, one hour each week: Mondays, ten to eleven, fifteen weeks.

Maritime Law—Hon. George Clinton, one hour a week: Thursdays, ten to eleven, fifteen weeks.

Constitutional Law—Hon. Charles Daniels, one hour each week : Thursdays, ten to eleven, fifteen weeks.

Legal Ethics—Hon. Albion W. Tourgee, six lectures ; dates will be announced.

Trials—Hon. L. L. Lewis, one hour each week : Wednesdays, ten to eleven, ten weeks.

Taxation—Lecture to be announced, one hour a week : Wednesdays, ten to eleven, ten weeks.

Trusts—Hon. L. N. Bangs, once a week : Fridays, ten to eleven, twenty weeks.

Roman Civil Law—Sheldon T. Viele, once a week : Tuesdays, nine to ten, ten weeks.

International Law—Hon. S. S. Rogers, once a week : Wednesdays, ten to eleven, ten weeks.

Practice in Civil Actions—Charles P. Norton, two hours each week : Tuesdays, ten to eleven, Thursdays, nine to ten, for the entire year.

A NOVEL DEPARTURE IN ADVERTISING.

Believing that the advertising of medicinal preparations often fails of its purpose, viz., to clearly and intelligently present to physicians their special advantages, pharmacal or therapeutic, on account of the fragmentary and imperfect manner in which the facts are usually conveyed in such advertisements, Parke, Davis & Co. propose to inaugurate rather a novel departure in advertising. It is their intention to publish in the advertising pages they occupy in medical journals a series of what they term plain talks to physicians, in each issue, taking up a certain class of preparations and pointing out the reasons why they deserve to be prescribed, until all their preparations shall have thus been presented. The excellence of the products of this house are well known, and it is to be presumed that their long experience in the manufacture of medicines will enable them to say in these informal talks something of real interest and benefit to their medical friends.

Book Reviews.

The Curability of Insanity and the Individualized Treatment of the Insane.
By JOHN S. BUTLER, M. D., Hartford, Conn., late Physician and Superintendent of the Connecticut Retreat for the Insane, etc. New York and London: G. F. Putnam's Son. 1887.

This little work brings out the author's experience in the treatment of insanity while connected with the Connecticut

Retreat. It aims to emphasize the individualized treatment of mental diseases, based on the physical peculiarities or idiosyncrasies of each case. The work is of special interest to the alienist, to whom we commend it.

Anæmia. BY FREDERICK P. HENRY, M. D., Professor of Clinical Medicine in the Philadelphia Polyclinic, etc. Re-printed from the Polyclinic. Philadelphia: P. Blakiston, Son & Co., No. 1012 Walnut street. 1887.

This work on anæmia is the first treatise on this disease published in this country. It discusses the varieties of anæmia as chlorosis, anæmia lymphatica, leuco-cythæmia, anæmia splenica, pernicious anæmia, tox-anæmia, parasitic anæmia, etc. It is a valuable compend on a disease, or class of diseases, frequently met with by the practitioner. It is written in a clear and concise style, and shows the author to be an accurate student and possessor of a facile pen in recording the results of his observations.

Practical Lessons in Nursing. Outlines for the Management of Diet or the Regulation of Food to the Requirements of Health and the Treatment of Disease. BY EDWARD TUNIS BRUEN, Assistant Professor of Physical Diagnosis, University of Pennsylvania. Philadelphia: J. B. Lippincott Company. 1887.

This work contains the substance of a course of lectures to the nurses of the training schools of the Philadelphia University of Pennsylvania, and Woman's Hospital. The author has successfully subordinated the scientific aspect of the subject in the presentation of valuable suggestions in the selection of food in health as well as disease. The work presents a condensed summary of facts bearing upon the important subject of dietetics, especially to those engaged in nursing the sick, and we commend it to the profession, to assist them in the management of their patients.



VOL. XXVIII.

NOVEMBER, 1887.

No. 4

Original Communications.

*FORCED RESPIRATION IN OPIUM POISONING—ITS POSSIBILITIES, AND THE APPARATUS BEST ADAPTED TO PRODUCE IT.**

By GEO. E. FELL, M. D., F. R. M. S.,

Professor of Physiology and Microscopy, Medical Department of Niagara University, Fellow of the
New York State Medical Association, President of the Buffalo Microscopical Club,
Physician to Sisters of Charity Hospital, etc., Buffalo, N. Y.

In one of the latest extensive medical works†, we find that artificial respiration has a wider range of application than might at first be supposed. It is said to have been used in "drowning, strangulation, occlusion of the air passages, poisoning by carbonic acid gas, chloroform, opium or its alkaloids, strychnia, woorara, snake-bite, in hemorrhage, or even in nervous shock from a blow or fall." Of the methods, a few may be mentioned, as those of "Marshall Hall," "Sylvester," "Howard," and others, which depend for their success upon the movements of the limbs or body of the patient, supplemented, usually, by pressure of the thorax on the part of the physician; those in which tubes and mouth-pieces are used, and the air supplied by bellows of different forms, and the methods used on various animals in the physiological laboratories, in which the trachea is opened to supply the air for respiration.

* Read before the Section of General Medicine of the International Medical Congress, Washington, D. C., Sept. 9, 1887, and before the Buffalo Medical Union, Oct. 26, 1887.

† Wood's Reference Hand-Book of the Medical Sciences.

The first of this series of methods is that generally adopted, and may be found efficacious so long as the muscles of respiration retain their tonicity, and the heart has not ceased to beat.

The second series, in which mouth-tubes are used, may prove uncertain in action, owing to the difficulty of passing the air into the (paralysed) larynx, with the œsophagus presenting a more direct road for its passage to the stomach.

The third series, differing from the others, presents a *positive* method. By opening into the trachea, we are enabled to force air into the lungs, and by forcible pressure on the thorax, if needed, expel it.

To the latter method, I suggest the term *forced*, to distinguish it from the ordinary *artificial respiration*.

After extensive reference to the most important medical works, and with the assistance of some of the leading practitioners of Buffalo, I have been unable to find a case in which *forced respiration* has been used upon a human subject in opium poisoning. The question may be raised by some of our ultra-conservative practitioners as to whether this operation of tracheotomy, with its supposed attendant dangers, and application of forced respiration, even in extreme cases, is justifiable? Or would not the ordinary methods of artificial respiration usually employed be quite sufficient? I am pleased to answer this question, by recounting the case which influenced and determined me to make the operation when opportunity offered.

CASE OF THOS. J. DYKE.

Thos. J. Dyke, a night clerk in Mr. C. M. Lyman's drug store, Buffalo, took an over-dose of morphine about midnight, June 22, 1886. On the morning of the 23d inst., as soon as he was discovered, some other physicians, with myself, were called to attend him.

The symptomatic effects of the poison were markedly evidenced, and with the whole armamentarium of a most complete drug store at our disposal, it was hoped we might save our patient. Electricity, atropia, coffee extract, brandy and active

movements were used. *Artificial respiration*, by "Sylvester's" method, was also employed; for a time it appeared to be beneficial, but only for a short time, as the patient soon succumbed to the inevitable. At this time, I felt keenly the inadequacy of the methods at our command, and then resolved, if opportunity ever offered, to make the operation which I have now to record, and which, I believe, might have saved Mr. Dyke's life.

In my opinion, after artificial respiration fails in cases of this nature, the *forced respiration* indicated is justifiable, and the value of its application will, I feel sure, be admitted, after the recital of the case which I now have the honor of presenting to you.

CASE OF PATRICK BURNS.

At 12.30 A. M., Saturday, July 23, 1887, I was hurriedly called to attend Mr. Patrick Burns, book-keeper, residing at No. 49 Morgan street. I found the patient in a semi-conscious condition. His wife reported he had been drinking heavily for a week past, and had been in the habit of using alcoholic liquors to excess for ten or twelve years.

His present excesses had induced him to try chloral to produce sleep, but not finding this to succeed, he had added morphine, with the results recorded in the following pages. According to his statement, he had taken the drug late Friday afternoon, so that sufficient time had elapsed to permit complete absorption. When first discovered by his wife, he was breathing stertorously, and was with difficulty aroused. A draught of black coffee was given, which produced vomiting. On my arrival, I supplemented this with one of mustard, sodium chloride and water, which effectually emptied the stomach. This produced no further effect, as the patient, left to himself, immediately passed into the deep, narcotic condition of opium poisoning. The pupils were markedly contracted, and it was evident a serious case was in hand. At this time, I administered two cathartic compound pills which I had with me, and, at different times, minim doses of fluid extract of belladonna, sent for some atropia, and frequently administered the one-sixtieth of a grain hypodermically. To

keep the patient awake, he was dressed and walked around the block in the cool, pure atmosphere of the early morning. At each round I examined him and administered more atropia. The fourth or fifth round, when within one-half block of the house, his limbs gave out, and while being tugged and jerked along, sturturous breathing began again; he was carried into the house and laid on the floor, as I believed, to die. This was about 3.30 A. M. As the respirations failed, and the intervals between them lengthened, *Sylvester's method of artificial respiration was employed, and kept up at intervals* long after I had given up any hopes of the man's recovery and until I was thoroughly exhausted, and, *further*, without apparent benefit to the patient. In the meantime, I notified the family that the patient could not live, with the effect of producing the scenes usually associated with tragic death in the household; Mrs. Burns had a slight attack of hysteria, requiring my attention for a time. At this juncture, Father Grant, of the Cathedral, appeared, and performed the last rites of the Catholic Church. At my suggestion, a bed was prepared in the front parlor of the house, and the patient laid upon it. From Mrs. Burns, I obtained the data for the death certificate, which I confidently expected to file in the morning. I then took a last look at the patient, only to confirm my opinion that death was imminent.

The pulse, before Father Grant came, had registered as high as 180, and before I left the house it could have been counted with difficulty—I considered it 200 or more. The respirations at four o'clock in the morning were five per minute, and, when I left the house for home, were intermittent, or with a long intermission followed by a few spasmodic respiratory efforts, and then apparent inanition for a time. I may be criticised for leaving my patient at this time, but I was tired out (no excuse), and fully believed no power on earth could save him; in fact, informed his wife that I did not think calling another physician would do any good.

With an unaccountable reluctance, I left for home a little after five o'clock in the morning, went to bed, and, after a sound sleep, was awakened by a call about eight o'clock.

Dr. F. R. Campbell, Professor of Materia Medica, Medical Department, Niagara University, who, through illness, had been unable to respond to an early summons from Mrs. Burns, called about eight A. M., and finding Mr. Burns still alive, sent for me. I promptly repaired to the house, and, indeed, found the patient alive, with respirations *not more* than one per minute, and the pulse with difficulty to be detected at the wrist.

The extremities were quite cold at this time, the face had assumed a cyanotic appearance; pupils were still contracted. The doctor suggested that more atropiæ be given hypodermically, to which I assented. Together, we repaired to the drug store near by, had some powders prepared, and on our return were surprised to find the pupils *widely dilated*; it is needless to say *no more* atropia was administered. The sudden dilatation of the pupils was, undoubtedly, caused by the paralysis of the nerve centers controlling the iris, and is one of the frequent conditions in the *last stages* of opium poisoning, and indicative of general muscular paralysis; it is also known as the "dilatation of asphyxia."

Dr. Campbell made the remark: "We can do nothing more now." I agreed with him, but recalling the case of Mr. Dyke, and having had a number of similar cases, some of which had recovered and others proved fatal, when the ordinary methods of artificial respiration had proved unavailing, I had frequently thought if the respirations could be kept up by suitable means for a sufficient time to permit the elimination of the poison, life might be saved. Having held the chair of Physiology and Microscopy in the Medical Department of Niagara University since the institution of the department, I was conversant with the procedure and requirements in the performance of artificial respirations on dogs, and believed the method used in my laboratory could just as well be performed on the human subject. This, coupled with the fact that I am engaged in the active practice of medicine, seemed to offer the conditions on the part of the physician, by which the operation I am about to describe was brought about to be made of practical value in the saving of

human life. I informed Dr. Campbell that Mr. Burns' life could, in my opinion, only be saved by opening the trachea, placing a tube in it, and, with suitable apparatus, keep up the respirations until the poison could be eliminated. I informed him that I had the apparatus used on dogs in the laboratory of the college at my residence near by. He, to my surprise, offered to assist if I would make the experiment. As expeditiously as possible, with the aid of a gentleman stopping at the house, I obtained the apparatus I exhibit here, and, with the exception of having the tracheal tube covered with dog-hair and blood*, it is in the same condition as when used on Mr. Burns. On my way, I asked Dr. G. H. McMichael† to assist in the operation.

DETAILS OF OPERATION.

The tracheal tube was quickly cleaned with a bi-chloride solution, and, with instruments illy adapted to the purpose, the operation was begun at nine o'clock A. M. As tracheotomy cannot offer any points of interest, reference need not be made to it. After making the initial low incision, Dr. Campbell suggested that *laryngotomy* would take less time; I hesitated, but thinking that Mr. Burns' voice would be in better condition *after recovery*, on account of less danger to the vocal chords, with the low operation, I continued the opening.

The hemorrhage, which was considerable, was soon overcome with hæmostatic forceps and ligation. Before incising the trachea, it was reduced to a minimum. The greatest difficulty was experienced in passing a ligature about the trachea to prevent the air from passing up the throat. After this was accomplished, we were ready to begin the respirations. The color of the blood passing from the incision was of a *dark* coffee-color, indicating an extreme venous condition.

* A few days before this, the apparatus was used in electrical experiments on a dog at the dog-pound.

† Dr. McMichael's niece, a little girl, hearing about the proposed operation, informed her cousin, a reporter on the *News*, that the doctors were operating on a man's throat. Before the operation was completed, this reporter appeared upon the scene, vanished, and, before I had left the bedside, the operation was being heralded about the streets. As criticism has been made in the pages of this JOURNAL, deploring the press publication, I deem it a duty to show I was wholly irresponsible for its appearance. When I was subsequently interviewed, knowing full well I could no more keep this case from the press, after having once appeared, than I could keep the sun from rising, I gave merely a plain account, and am not responsible for the reportorial "gush" accompanying the criticised article.—G. E. F.

Having been deeply occupied with the operation, I had not noticed the condition of the patient further than to state that no respiratory effort had been made for some time, and the dark-blue tinge to the face had materially increased.

We began the *forced respirations*, and, as some interesting physiological changes ensued, it may be well to note them carefully. The lungs were inflated; not the slightest expiratory effort was made indicating paralyzation of not only the muscles of respiration, but the loss of elasticity in the lung tissue.*

Physiological experiments have demonstrated that the heart in the lower animals, shortly after ceasing to beat, may again be called into action by passing arterial blood through its channels.

We may readily imagine the human organism in asphyxia, or where the heart is weakened by insufficient nourishment, in a condition simulating this, and where, by re-supplying the heart with oxygenated blood, its life may be retained. Who will say that a human heart, after ceasing to beat rhythmically, may not yet be called into action? And are not the conditions for re-supplying the weakened heart with nourishment provided in forced respiration, and its practical value demonstrated in this case of Mr. Burns?

We stated that no expiratory effort had been made on the part of the patient; we had forced the inspiration, and now forced expiration was effected in the best manner by pressure on the thorax.

In forced expiration, we must necessarily send the blood in the capillaries of the lungs, which, by our forced inspiration, has been oxydised, into the left cavities of the heart, where not only does it nourish the waning heart muscle, but causes, to a certain degree, expansion of the left auricle, and produces a tendency to return to its rhythmical action.

CHANGES OBSERVED IN PATIENT.

The effect of the forced respirations were observed much sooner *on the heart* than on *the lungs*. The change from the venous to a more arterial state of the blood was the one first

* Are not these the conditions calling for *forced respiration*, and where artificial respiration would certainly fail?

noticed; it was also observed that the pulse at the wrist had become stronger and quite regular; this was some time before any attempts at respiration on the part of the patient were noticed. The forced respirations, in fact, were kept up some twenty to thirty minutes before any attempts at breathing were noted, and, before others were observed, a long interval elapsed; in the meantime, the face had begun to assume a more natural appearance, the dark, venous color had given way to the natural ruddy appearance of health, and then came two or three quick, hurried movements of the lungs, the *first attempts* at natural breathing. The lungs subsided, and without both *forced* inspirations and expirations, some time after this, our patient would have quickly succumbed. Sensibility was quickly returning, as evidenced by movements of the muscles of the eye when pressed by the finger.

The next feature of interest was a movement of the limbs, quickly followed by one of the arms, and, shortly following this, the eyes opened, staring wildly. We soon found that our patient could hear and understand. Water was offered and eagerly drank; inclinations or slight nods of the head would indicate when he desired more and had had enough. All this time, we were performing the respiratory acts for him, and to me the various effects produced by *withholding* or supplying an *excess* of air were extremely interesting, and, enhanced from the fact that it was a human being we were operating upon. Without knowing what the future of the case might develop, I believed at this time I had saved this man's life, and that he would fully recover.

After about two hours' work, the natural respirations became longer and longer, until they appeared almost normal. The opening in the side of the valve (one-eighth by one-half inch, or one and four-tenths by three-tenths mm.), which permitted the natural respirations, was not large enough to supply the lungs with their full requisite of air, so that natural breathing could only be carried on for a short time before dyspnoea would ensue. This was evidenced on the part of the patient by gasps and uneasy movements. When this occurred, the natural were supplemented by the *forced respirations*, with the effect of always

quieting and easing the patient. When the *forced respirations* were kept up for a short time, and the blood became surcharged with oxygen, it would be some time before attempts to breathe would be made—this was frequently observed; advantage was taken of this, and the blood surcharged with oxygen when the change from the cumbersome tracheal tube of the respiratory apparatus was made for an ordinary tracheotomy tube, when the patient was allowed to breathe for himself.

No mention has been made of the difficulty encountered in the operation after the patient revived and began to move uneasily about; these movements loosened the tube in the trachea and started hemorrhage, and as at this time the patient was depending upon the forced respiration for his life, the result was made uncertain. This was the most serious time in the operation. In the house were boarding three soldiers, William H. Lees, C. H. Eddy and Daniel Stuber, of the U. S. recruiting service; they were quickly summoned, and performed efficient service in restraining the patient. At this time, and before the tracheal tube was first inserted, considerable blood passed into the lungs; it was subsequently coughed out at the valve of the apparatus.

At twelve o'clock, mid-day, after the forced respirations had been under way *two and one-half hours*, an ordinary tracheotomy tube, as stated, was substituted for the tube of the apparatus, and the patient allowed to breathe for himself.

QUANTITY OF MORPHINE TAKEN.

The amount of morphine taken by Mr. Burns was ascertained to be nearly twenty grains. He stated, on questioning, that he had a powder two inches long, three-fourths of an inch wide and about one-fourth of an inch thick, and that he took the half of it.

ADVISABILITY OF ADMINISTERING PURE OXYGEN.

It has been suggested that pure oxygen might be better than ordinary air in artificial or forced respiration. My opinion is that

it would be superfluous, under the conditions existing, when it would be necessary to resort to it; we have the *reduced hæmoglobine* calling for oxygen, and ready to grasp it in whatever form it is offered, and the supplying of pure oxygen would, on this account, appear superfluous, and unnecessarily complicate the apparatus.

DELIRIUM TREMENS COMPLICATION.

To add to the uncertainties of the case, the night following the operation, a bad attack of delirium tremens set in, the patient became quite violent, requiring at times four or five men to restrain him. This condition passed away, and with the exception of abnormalities in the number of respirations, nothing further happened to complicate the case.

OBSERVATIONS ON THE RESPIRATIONS.

In the variation in the number of respirations, we find one of the most interesting and instructive features of the whole case. When the operation was begun at nine o'clock, Saturday morning, the rate was *less than one* per minute; when completed three hours later, some *eighteen or twenty* per minute, and remaining at the normal number during the rest of the day. During the following night, they were again modified by the delirium, and the next day, or about twenty-four hours after the operation, had lowered to the unpleasant rate of *only six per minute*. Here they remained for a short time, then gradually came up to eight, ten, twelve and fifteen, and, two days after the operation, became normal in number and action. This remarkable variation can most easily be explained by assuming that the shock and paralysis to the system had been almost completely overcome by the forced respiration; that the effect of the residual poison in the blood did not exert its influence under the forced respirations, but that in the following twenty-four hours, under the ordinary conditions of the system, the poison *remaining* again produced its effects; and had not the eliminative organs steadily continued to rid the system of the poison, secondary poisoning might have taken place, with serious, if not fatal, results.

From these conditions, a two-fold deduction may be made:

First—That some narcotic poisons, even if absorbed in sufficient quantity to produce fatal results, may, by *forced artificial respiration*, be prevented from exercising their influence on the organism.*

Second—That an instrument intended for the production of *forced respiration* should be so arranged that the respirations may be readily renewed within twenty-four hours.

ELIMINATION OF THE POISON.

The catheter was used three or four times daily for the two days succeeding the operation, after which, the paralyzation of the bladder being overcome, it was discontinued. Owing to the cathartics administered early in the case, followed by others after the patient had been resuscitated, good movements of the bowels came on early, with good results.

APPARATUS FOR FORCED RESPIRATION.

With these general remarks upon this case, which in many respects I believe to be one of the most interesting recorded, I will call your attention to the essential conditions required in an instrument adapted to the performance of forced respiration:

First—An air-forcing apparatus—ordinary bellows.

Second—A tracheal tube, which may be left in the trachea for twenty-four hours or more if required, and fitted with annular corrugations or a rubber tampon, as in the rubber tampon of Semen, to permit it to be securely held or tied in the trachea.

Third—A valve so arranged that the surgeon can completely control the passage of the air from the bellows to the lungs, and, when free, will permit the air to pass readily out and into the lungs, or, in other words, so that the surgeon need only manipulate the valve during the inspirations.

Fourth—To prevent the movements of the patient from disarranging the tube in the trachea, a flexible rubber tube connection should be made between the tracheal tube and the air-

* If this should prove true in other cases, it would almost imply that death need not result from opium poisoning when forced respiration is employed. The facts in this case are just as stated.

supply valve; and to insure greater convenience in manipulation, a flexible connection should be provided between the air-supply valve and the bellows-apparatus.

Fifth—The tracheotomy tube should be supplied with a movable piece, to which the rubber tubing can readily be attached or detached, to allow the respirations to be renewed when required.

With an apparatus of this form, simple in its working, practical, reasonable in expense, and supplemented by foot-bellows, I believe it possible for a practitioner, without an assistant, to make the entire operation and resuscitate a patient in as perilous a condition as our Mr. Burns was found to be.

An important addition to this apparatus, which could easily be added and not complicate the operation, would be a vessel of tin, or copper, arranged similar to a Woolf bottle, in which the air passing through water, heated with a spirit lamp, and medicated, if desired, with a suitable stimulant, could be used in cold weather. The value and simplicity of such an apparatus, supplied with a thermometer to gauge the temperature of the water or air, is at once apparent; the depression produced by forcing *cold* air into the lungs could be obviated, and consequent injury to the lung tissue would be reduced to a minimum.

In this small satchel, I have the first complete apparatus of this kind (excepting the vessel for heating the air); its portability is apparent, and for *forced respiration* on man, or in the physiological laboratory, its convenience and practicability would appear unquestioned.

WILL FORCED RESPIRATION INJURE THE LUNGS?

In the case of Mr. Burns, not the slightest evidence was given of any injury to the lung tissue from the forced respirations; the judgment of the surgeon must be exercised here and prevent over-inflation of the lungs; with a valve in the apparatus to control the inspirations as previously described, there need be no apprehension on this point.

FORCED RESPIRATION WITH INTUBATION OF THE LARYNX.

The application of *intubation* of the larynx to forced respiration, I have considered, and while believing it may yet be applied, see many difficulties which may possibly be overcome, but even then do not consider it will offer such positive results as the performance of tracheotomy. The simple apparatus I have supplied could be used as readily in controlling the respirations in intubation as in tracheotomy.

With these remarks, gentlemen, I leave the subject for your consideration, adding only that forced respiration may be made available, not only in opium poisoning, but also in almost all varieties of conditions in which artificial respiration has been used, and with the certainty that it will be a more potent means of saving life than the latter.

Furthermore, its possibilities can only be determined by actual experiment in many cases where any other means at our commands must certainly fail.

THE TREATMENT OF NEURALGIA IN GENERAL PRACTICE.*

By GUSTAVUS ELIOT, A. M., M. D., New Haven, Conn.

No disease of the nervous system comes under the care of the general practitioner more frequently than neuralgia. Concerning the treatment of no common disease, with the possible exception of dyspepsia, are the directions contained in the popular text-books more inharmonious and indefinite. A writer often speaks in terms of the highest praise of some drug which other authors scarcely mention; while other drugs, to the value of which many have testified, is simply named—without any remarks in regard to the special indications for its use, the proper dose, the necessary frequency of administration, and the length of time for which it should be continued.

* Read before the Section of Psychological Medicine and Diseases of the Nervous System, of the Ninth International Medical Congress, at Washington, D. C., Thursday morning, September 8, 1887.

Most of the recent contributions to the therapeutics of neuralgia—and they have not been few—have been descriptive of drugs or remedial measures which are not applicable to ordinary cases, but have proved useful in cases presenting unusual characteristics, or in cases which might have been cured with equal, and perhaps greater, promptness by the use of better-known and well-established remedies. It is not of the former—the unusual—cases, nor of peculiarly obstinate cases, that this paper is intended to treat, but of the ordinary acute attacks, which lead the sufferers to consult a physician at the outset of the disease, when a prompt, complete and inexpensive cure is demanded. Active and efficient remedies are requisite for such patients. Often they see the physician but once, and expect that a single prescription will effect a cure. What plan of treatment shall be adopted at the first consultation? What remedies are the most reliable? How far can they be depended upon? Such problems as these again and again confront the general practitioner.

Before entering the strict confines of the subject, it is desirable, in order that the grounds upon which some of the conclusions are based may be understood, that some general observations should be made concerning the nature and relations of neuralgia. As commonly seen in practice, it is, so far as has been demonstrated, a purely functional disturbance of the affected nerves. The painful phenomena due to pressure and neuritis are of a different nature, and deserve separate consideration. Almost any of the sensory nerves may be affected. Those which suffer most frequently are the different branches of the trigeminal, cervical, brachial, intercostal, lumbar and sciatic nerves. Certain recurrent paroxysmal affections of the visceral nerves are also truly neuralgic. Not every case of colic or spasmodic affection of the hollow organs and passages of the abdominal and pelvic cavities should, however, be included under this head. On the other hand, that painful, unilateral, paroxysmal affection of the head, known as migraine, may fairly be classed as neuralgic.

In order to select a rational plan of treatment, it is necessary to have some definite ideas in regard to the relation which the disorder in question bears to certain other diseases and abnormal states. One of the most important conditions which favor the development of neuralgia is an alteration of the blood, and particularly a deterioration of its quality. Romberg said: "Pain is the prayer of a nerve for healthy blood," and in a large proportion of the cases of neuralgia, the influence of anæmia is very striking. Especially in chronic and obstinate forms of the disease, is a recognition of its influence an important pre-requisite for successful treatment.

The presence of certain abnormal substances in the blood may directly, or in connection with other pre-disposing conditions, cause neuralgic manifestations. The contamination of the blood by the products of certain abnormalities of digestion and assimilation, as well as by certain excrementitious substances which have escaped elimination, deserves particular mention as an etiological factor. Certain morbid agents, which ordinarily cause other manifestations, may also occasionally give rise to a neuralgic attack.

In certain sections of this country—among which is Connecticut, the residence of the writer—it has become customary to describe as malarial nearly every disease which shows an intermittent or remittent character, and to consider this diagnosis of the etiology of the affection as completely demonstrated, if benefit follows the administration of the cinchona alkaloids. Many seem to be ignorant of, or to forget, the fact (to which Dr. David Clarke, of Toronto, called the attention of this section on Tuesday morning,) that neuralgia is a paroxysmal disease, and is characterized by remissions and intermissions. When it is remembered that quinine is one of the most active tonics and stimulants of the nervous system, it will readily be seen that the influence of quinine upon the neuralgic symptoms must be regarded as of little value in proving or disproving their malarial origin. Unquestionably, some cases are due to malarial poisoning, but the ratio which these bear to the total number is much smaller than it is generally believed to be.

Another less prevalent, but equally erroneous, view attributes a rheumatic origin to many cases of neuralgia. The truth of the matter is, that such a relationship can be definitely established only with extreme infrequency.

Syphilis—the pains following syphilitic periostitis, and the osseous pains being excluded—occasionally, though not very commonly, can be recognized as causing true neuralgia.

A lithæmic condition somewhat pre-disposes to painful affections, including neuralgia, generally of a sub-acute or chronic character.

Equally important with these anæmic and toxæmic influences, and frequently associated with them, stands the influence of an excessive expenditure of nervous energy. Fatigue or exhaustion, either physical or mental, strongly pre-dispose to attacks of neuralgia. In much the same way, cold and dampness call for an extra amount of nervous energy, in order to maintain the usual functional power of the nerve, and when this is not forthcoming, neuralgia often follows.

The dependence of neuralgia upon reflex causes is a subject of considerable complexity and uncertainty. The most common and obvious illustration of this relationship is the dependence of trigeminal neuralgia upon caries of the teeth. This is often proven conclusively by the relief which follows the extraction of the diseased tooth.

Of all the drugs which have been recommended and tried in the treatment of neuralgia, three are invaluable. They are morphine, quinine and iron. In acute attacks of marked severity, morphine is almost indispensable. It is preferably administered, if the patient is seen while severe pain continues, by hypodermatic injection. Given by this method, in doses of one-quarter or one-half grain, at the onset, or during the persistency of a paroxysm, the relief which follows is prompt, grateful, and often complete. Thus used, it is always palliative, and sometimes curative, a second attack never occurring.

It is, however, rather unusual to see the course of neuralgia immediately arrested by this treatment, if it is commenced after

more than one paroxysm has occurred. In these cases, it is desirable to prescribe, if possible, some remedy which is more directly curative. The drug which acts more positively in this direction than any other, which more justly than any other might be called a specific, is quinine. It should be given in large doses, and is of value in all cases, but especially in those which are markedly paroxysmal, and most of all in those which are dependent upon malarial poisoning. The relation of neuralgia to this cause, and the necessity of giving large doses of quinine in order to effect a cure, are illustrated by the history of one of the first cases which came under my observation six years ago, during my service as resident physician at the New York City work-house.

Case of Malarial Supraorbital Neuralgia.—J. C., male, thirty-two years old, while under treatment for an ulcer of the leg suffered an attack of intermittent fever, which was promptly cured. A few days later, he had an attack of neuralgia, affecting the right supraorbital nerve, which recurred every morning. Fifteen-grain doses of sulphate of cinchonidia, given early each morning, had no effect upon the recurrence or severity of the paroxysms. The dose being doubled, and thirty grains given at once, no further paroxysms occurred. He remained in the hospital two months, during which he enjoyed immunity from the disease.

Similar observations as to the efficacy of large doses of quinine have been recorded by different authors with regard to cases in which a malarial origin could not be detected.

In a considerable proportion of cases, anæmia is not a prominent feature. The patients are well-nourished and full-blooded subjects. In them, neuralgia is an expression of an exhaustion of nervous force, perhaps due to cold or to over-exertion; or of a toxæmia, perhaps malarial; or of some reflex irritation. In the latter cases, the removal of the source of irritation is, of course, indicated. In the other cases, in connection with proper hygiene, including, as of highest importance, rest and good food, a combination of quinine and morphine is of the greatest value.

In such cases, seeing the patient in the interval between the paroxysms—when, of course, the hypodermatic use of morphine is not indicated—it is often convenient to give the two drugs together. One drachm of sulphate of quinine and one grain of sulphate of morphine, having been thoroughly mixed, may be divided into twelve powders. Of these, one may be given two or three hours after each meal, and two (or more, if necessary,) at once, one or two hours before the paroxysm is expected.

In another large class of cases, anæmia is the predominant characteristic. These cases are often exceedingly obstinate, and likely to recur. For them, no drug is more valuable than iron. When given continuously, as the quality of the blood improves, the neuralgic tendency grows weak.

As remedies of secondary value, may be classed gelsemium and aconite. These drugs have both been very highly commended for the cure of neuralgia. They certainly deserve to be ranked as valuable adjuncts to the remedies previously named. The danger of producing unpleasant toxic effects with either drug is, however, so great as to render it inexpedient to rely upon either as a single remedy in ordinary cases. The uncertainty in regard to the strength of the various preparations, as manufactured by different pharmacists, is also so great as to constitute a serious hindrance to the general use of either drug. Furthermore, the varying susceptibility of different patients introduces another element of uncertainty. I desire, however, to bear personal testimony to the utility of five-drop doses of the fluid extract of gelsemium, repeated every four hours, and given in connection with quinine and morphine. These three together will often give most favorable results.

As remedies of the third class, may be mentioned arsenic, nux vomica, belladonna, phosphorus and iodide of potassium. These have long been highly commended. I name them rather in deference to popular opinion than because I consider them of great value. I have used them all, but have failed to obtain with them results which warrant me in commending them. Arsenic, in particular, has been recommended by many authors. I have

never seen very marked improvement follow its use. On the contrary, I have seen symptoms of considerable severity develop in spite of its administration in full doses, advised with the hope of preventing the attack. As an adjuvant of iron in cases of anæmia, it is unquestionably of value in curing the anæmia. Thus, indirectly, it may contribute to the cure of neuralgia. Similarly, *nux vomica* and its alkaloid, strychnine, are of use as stomachic tonics, when the general nutrition is impaired by indigestion.

External applications are of considerable utility as adjuvants to internal medication. Counter-irritants have been largely used. In obstinate cases, particularly of sciatica, blisters and cauterization sometimes do great good. In cases of moderate severity—as in intercostal neuralgia—sinapisms, applied either over the seat of pain, or over the origin of the affected nerve, often afford some relief. Various sedative applications have some value as palliatives. I have frequently used a mixture containing one part of oil of gaultheria and two parts of olive oil, or a combination of equal parts of oil of origanum, tincture of opium, spirit of ammonia and olive oil—known as Fahnestock's liniment—warmed and thoroughly rubbed along the course of the affected nerve and its branches, hot flannel being superposed, and have found that either will produce a palliative effect in many instances.

Electricity is of unquestionable value in the treatment of neuralgia. The majority of cases, however, get well without it. In order that it may be used satisfactorily, it is necessary that the practitioner should own expensive and cumbersome apparatus, and that he should have sufficient special knowledge to enable him to keep it in order, and to use it. As the majority of neuralgic cases cannot be induced to make frequent and regular visits to the physician's office, and as many of them are seen only at their homes, often at long distances and at not very brief intervals, it is apparent that electricity can hardly be classed among those remedies of which the general practitioner would be likely to make early trial.

In the treatment of sub-acute and chronic cases, occurring in over-worked, under-fed and half-rested subjects, in whom indigestion is a frequent accompaniment of the neuralgia, remedies applicable to the digestive disturbances are to be used, with general tonics, in addition to the drugs which act more directly upon the nervous system. Useful combinations of this kind include aloes, strychnine, arsenic, quinine, iron and phosphide of zinc, or gelsemium, with cardamon, nux vomica and cascara sagrada.

In conclusion, I wish to emphasize the impracticability of relying upon any single drug or therapeutic measure in the treatment of neuralgia. The most useful drugs produce the best results only when given in such large doses that there is danger of the production of unpleasant symptoms. It is, therefore, far more wise to combine different remedies in such a way as to effect a cure without causing the patient discomfort. Morphine, quinine and either gelsemium or iron, with warm external applications, will prove useful in the majority of acute cases. In sub-acute and chronic cases, the morphine should be omitted, and stomachic and intestinal tonics substituted therefor.

Clinical Reports.

A CASE OF PROSTATIC CALCULUS.

By J. W. PHILPOTT, M. D., Fort Madison, Iowa.

Prostatic calculi are of such infrequent occurrence, that the following brief report of a case may be of interest to the profession:

T. S., aged sixty-two years, of good habits, had been a great sufferer for several years with a disease referred to the bladder by physicians whom he consulted. His business compelled him to ride on horseback, until he was compelled to relinquish that kind of physical exercise on account of the pain and inconvenience following every journey. The symptoms were: irri-

tation and inflammation of the prostatic portion of the urethra and neck of the bladder. The urine was acid in its reaction, and micturition gave him great pain. The muscular walls of the bladder were atrophied to an extent that compelled the use of a catheter to empty the organ several times daily.

The treatment consisted usually of alkalies by the stomach, and the washing out of the bladder with warm water, and the biborate of soda or a weak solution of carbolic acid. Failing to obtain relief, he visited New York, to consult a specialist. Two of the most eminent genito-urinary surgeons of the metropolis, whom he consulted, after a thorough examination of the case, diagnosed an enlarged prostate, and advised the continuance of the treatment which his attending physician had previously instituted. About ten days after his return to Iowa, quite disheartened from his failure to obtain the sought-for relief from suffering, which had at that time become well nigh unendurable, while urinating, a solid calculus passed away and fell into the vessel. This calculus was about the size of a large pea, and of an oblong form. His symptoms were ameliorated at once, the painful urination passed away, and all sensations, referable to bladder and urethra, which had made his life a burden, vanished. His health, impaired by the terrible sufferings of years, was restored, and he became a new man physically. The calculus was examined in its chemical composition by Prof. Geo. H. Shafer, Commissioner of Pharmacy of Iowa, who reported to me that it consisted of carbonate of lime, thus proving that it was a prostatic calculus.

This case is of sufficient interest to report. The rarity of cases of this type, and the favorable termination, will explain the motives actuating the writer in reporting it.

Translations.

STROPHANTHUS HISPIDUS.

By Dr. L. DENIAU.

Translated from *Bulletin Gen. de Therapeutique*, by F. A. HARRINGTON, A. M., M. D.

Strophanthus hispidus is a member of the botanical family *Apocynaceæ*. It is indigenous to southern Asia, but grows in greatest

abundance in tropical Africa. In Africa, certain of the natives employ the plant to poison their arrow-heads. Its active principle is *strophanthine*, a glucoside.

The plant had been the subject of study previously, but it was reserved for Prof. Thos. R. Fraser, of Edinburgh, to point out in detail its chemical, physiological and pharmacological properties, and to make a therapeutic application of the same. His latest account of the drug was published in the *British Medical Journal*, November 14, 1885.

Experiments prove that *strophanthus*, like *digitalis*, is a powerful cardiac stimulant, and, if exhibited in sufficient doses, causes death by paralysis of the heart.

After laying bare the heart of a frog poisoned by *strophanthus*, it will be observed that at first there is increased rapidity of the pulsations, but soon they slacken and finally cease. It is a curious phenomenon that, after the ventricular action stops, the auricles still continue their contraction and relaxation for a brief period.

Not only frogs, but turtles, snails, birds, rabbits, dogs and cats are killed by the active principle of *strophanthus*. Death ensues sooner after a subcutaneous injection of the drug than by absorption from stomach or rectum.

Experimentation, with a view to compare the rapidity of action of *strophanthus* and *digitalis*, establishes the fact that *strophanthine* produces death much more rapidly than the same dose of the purest crystals of *digitaline*. In studying the comparative strength of these drugs, it was ascertained that, although a solution of *digitaline*, one to four thousand, does not stop the heart of a frog, yet a solution of *strophanthine*, one to ten million, kills the animal.

In warm-blooded animals, death occurs much sooner, and the higher in the scale of life the animal is, the more speedy is the action of *strophanthus* in destroying life.

In mammals, death is very rapid. In five minutes after the injection of a poisonous dose of *strophanthus* subcutaneously, you notice signs of *malaise*, dyspnoea, disturbances of respiration, afterwards emesis, muscular paralysis, extreme irregularity of pulse and respiration, and, after a violent convulsion, death.

Susceptibility to the action of the drug may be diminished. As in the case of opium, a therapeutic dose may be taken with impunity.

This dose may be increased gradually until an amount may be administered that, if given at the outset, would have produced toxic effects.

Strophanthus, when introduced into the system, communicates its toxic properties to the blood, as is evidenced when a portion of the blood of a poisoned frog is injected into a healthy animal. Africans realize this fact, for they remove carefully the tissues around the wound in the dead animal.

A small dose has no apparent influence on the motor excitability of nerves, nor on their power of conductivity; and, should the reflexes be abolished, that disappearance is attributable to modifications undergone by the muscles, as they are sooner affected by strophanthus than the nervous system. Unstriated as well as striated muscular fibres are paralyzed, and, when their contractibility is once lost, no stimulus can excite them. The unstriated muscles lose their excitability much more rapidly than striated.

The vascular system is not altered by strophanthus, a characteristic distinguishing it from digitalis.

It has been proven that the drug acts on the heart, not through the medium of the medulla, the sympathetic system, nor the inherent ganglionic centers of the heart. It acts by simple contact with the muscular structure of the heart.

The heart, after death, is in a state of ventricular systole, and its muscle in a condition resembling cadaveric rigidity. It may be noted here that, among all the cardiac poisons, strophanthus leaves the heart after death in systole.

So much for the history and toxicology of strophanthus hispidus. The pharmacology of the plant has a more practical side.

It was in incompetency due to valvular lesions that strophanthus was first proven of inestimable benefit.

Dr. Deniau illustrates, by a series of sphygmographic tracings, the action of strophanthus.

A patient was admitted to the hospital with imperfect systole, orthopnoea, pulmonary oedema, cough, anasarca, passive congestion of the liver and the spleen, cardiac hypertrophy, a soft, indistinct *souffle* of apex, radial pulse, well-nigh imperceptible and incapable of count, and irregular. Under strophanthus, the pulse diminished to forty-eight and respiration to twenty-eight at the end of the fifth day, and there was an amelioration of all the other symptoms.

At the same time, there was a notable increase in the amount of urine, although strophanthus has no action in the calibre of the arteries. The diuresis was owing to the stimulation of the heart itself.

Not only in a systole consequent on valvular lesions, but in any case in which a cardiac stimulant is indicated, strophanthus is beneficial.

It has been employed in fatty degeneration of the heart, in acute endocarditis, in atheroma of the arteries, in chronic Bright's disease, in ascites produced by cirrhosis of the liver, and certain pelvic tumors, in the enfeebled heart after acute and chronic fevers, in acceleration of the pulse, and in reflex palpitation of neurasthenia, hysteria and chlorosis.

Strophanthus acts similarly to digitalis in the heart, but is not an accumulative poison. Dr. Emil Pius, of Vienna, says, in disturbances of compensation, strophanthus acts well. The pulse becomes stronger and diminished in frequency, respiration normal, and dyspnoea less marked. In asthma, the paroxysm was shortened and prevented. Diuresis begins, and oedema disappears, not to re-appear save in exceptional cases. In every way, the patient experiences relief.

What is very noteworthy, is that the time in which strophanthus acts is short. Dyspnoea may be relieved in a few minutes, and, in less than an hour, the pulse becomes modified.

The action is persistent. When there is but a slight disturbance of compensation, relief by a single dose continues for three or four months without a relapse.

The drug is especially efficacious against the dyspnoea, orthopnoea, and dropsy of morbus Brighti. Its uremic complications disappear on account of the acid reaction of strophanthus, and the power of increasing the blood pressure without any vaso-motor constriction of the arterioles.

In certain disturbances of circulation, it is of great importance to preserve the patency of the arterial system. In aortic stenosis and insufficiency, and in atheroma of the arteries, it is very essential not to increase the work of the heart by a resistance antagonistic to its propulsive power. The same is true of mitral valvular lesions, and, in a general way, in all diseases accompanied by an increase of the arterial tension.

In almost every instance, it is theoretically advantageous to localize the action of the drug on the heart itself, to the exclusion of the arterial

system and the stomach. Strophanthus fully accomplishes this object, and so it is invaluable in the long list of cardiac tonics.

Like digitalis, strophanthus is absolutely contra-indicated in the period of compensation of the heart. It then could only disturb its physiological action. In the feeble heart of pneumonia and phthisis, strophanthus is useful, and Dr. Fraser is inclined to believe that it diminishes the fever.

Thus far there have been only moderately good results in asthma, cardiac neuroses, *agita pectoris*, and in the dyspnoea of hysteria and chlorosis. In a general way, we may state that no good result follows the use of strophanthus in bronchial asthma, nor in acites depending on stasis of the *portal* circulation.

Consequently, strophanthus is contra-indicated in ascites of tumors, hepatic, splenic and pelvic, in respiratory and circulatory troubles of vaso-motor origin, in active hyperæmia, and in cases in which there is a tendency to visceral hemorrhages.

To strophanthus belongs the superiority over digitalis in the treatment of Bright's disease, and, in a general way, in valvular lesions of the heart. As a diuretic, it is not equal to either calomel, digitalis, or acetate of potash.

Thus we have in strophanthus one of the most important acquisitions to therapeutics. It does not exclude digitalis, but one is the complement of the other.

It differs from digitalis in stimulating the heart without any vaso-motor constriction of the arterioles. It diminishes the pulse, lowers temperature somewhat, is a diuretic, is not hæmostatic nor cumulative, and, unlike digitalis, it causes no gastro-intestinal disturbance.

Miscellany.

PREVENTIVE INOCULATIONS FOR SCARLET FEVER.—The day is probably not far distant when scarlet fever, at present the greatest scourge of childhood, will be as effectually prevented by inoculation as small-pox is by vaccination. Stickler of Paris observed that horses are often affected by a disease quite similar to scarlet fever, and, indeed, it is sometimes known to veterinarians by that name. He inserted about six drops of the nasal discharge of the diseased horse

under the skin of four rabbits and dog, and, within twenty-four hours, an exanthema resembling scarlatina appeared, which was followed in four days by desquamation. The associated symptoms were: fever, anorexia, redness of the nasal mucus membrane with abundant secretion, and enlargement of the lymphatic glands. The animals recovered in eight days, and the inoculation of scarlatinal blood gave negative results.

Stickler then inoculated twelve children with the mucus of the horse. In every case, a punctiform eruption appeared within twenty-four hours, and was accompanied by fever, and enlargement of the glands. The eruption lasted six days and terminated in desquamation. After recovery, these children were inoculated with scarlatinal blood with absolutely negative results.—*Gazette Med. de Paris.*

THE STENOCARPINE SENSATION—AN ATTEMPT TO IMPOSE UPON THE MEDICAL PROFESSION.—Our readers are, doubtless, familiar with the reports of Drs. J. H. Claiborne, Hermann Knapp and Edward Jackson, concerning the so-called new local anæsthetic, gleditschine or stenocarpine, which was published in the *New York Medical Record* July 30th, August 13th and October 1st, and *Philadelphia Medical News*, September 3d, in which gleditschine was claimed to possess remarkable anæsthetic and mydriatic properties. It will, therefore, be of interest to them to learn that Messrs. Parke, Davis & Co. announce that an investigation at their laboratory, of a solution purporting to be a two per cent. solution of gleditschine or stenocarpine, which was supplied by Messrs. Lehn & Fink, of New York, has developed the fact that this solution, with which the experiments thus far recorded have been made, contains six per cent. of cocaine and a sulphate of a salt which further experiment is likely to prove to be atropia. F. A. Thompson, Ph. C., also reports, after careful experiment with the leaves of *gleditschia triacanthos*, from which gleditschine or stenocarpine is claimed to have been derived, that they contain only an infinitesimal percentage of an amorphous alkaloid devoid of anæsthetic or mydriatic properties. In the light of these facts, it seems probable that the stenocarpine sensation should be classed with the hopeine fraud of malodorous memory, and that the physicians who have already published reports regarding gleditschine or stenocarpine have been the victims of a clever hoax.

A NEW EDITION OF GRAY'S.—Any marked change in a text-book so universally in use as Gray's "Anatomy," becomes a matter of no inconsiderable interest to the profession, and the announcement of a new and improved edition from the press of Lea Brothers & Co. will be received with interest. While thoroughly revised, the new edition possesses a marked feature in the use of colors in illustration wherever they can be of service in enabling the eye to more readily follow the details of anatomical construction. The care requisite for the proper printing of this colored edition has involved a delay, but the book will be issued early in November. Notwithstanding the unavoidable increase in size, the issue in black has been retained at its old price—\$6.00 in cloth, or \$7.00 in full leather, while for that in color but \$1.25 extra will be charged.

"DOCTOR, what do you think of this new treatment of consumption by injecting carbonic acid into the rectum?"

"Well, it certainly distracts the mind of the patient for awhile, and may do good by its moral effect by making him think of his latter end; he becomes, as it were, conscious of his rectum, as the school-boy rendered *mens conscia recti*. He may even 'bacilli' enough to cherish the hope that he is getting cured, and is taking a short cut to health over this *pons asinorum*, but I regret to say that I think he will find that the road will end as it began—in gas."—*Med. World*.

LANCEREAUX has published reports of cases tending to prove that cirrhosis of the liver is curable by the adoption of a strict milk diet, and the administration of iodide of potassium. He has succeeded comparatively well in the treatment of atrophic cases, but, where there is hypertrophy, the prognosis is not encouraging. The duration of the treatment varies with the severity and chronicity of the disease. Generally, at the end of fifteen days, there is marked improvement, but the treatment must be continued at least for a year.—*Jour. de Med. de Paris*.

SEGRETAS recommends faradisation of the gall bladder for the cure of catarrhal jaundice. This is done by passing one electrode into the rectum and placing the positive electrode over the gall bladder. The current is to be passed about ten minutes each day.

A CONVENIENT FORMULA FOR THE TREATMENT OF DIABETES BY LITHIUM IN PILL FORM.—Vigier recommends the following as more convenient than Martineau's arsenical liquid containing lithium :

R—Lithii carbonat. gr. iss.
 Sodii arseniat. gr. 1-25.
 Ext. gentian : gr. $\frac{3}{4}$.

For each pill.

To be taken morning and night, and continued until sugar has disappeared from the urine.

DIPHTHERIA has assumed an epidemic form in some portions of Buffalo. The Board of Health should take some active measures to enforce isolation in all cases of infectious disease. In Michigan and in the neighboring city of Rochester, it is customary to placard houses in which there are patients suffering from infectious diseases. Perhaps, the adoption of this method in Buffalo would tend to arrest the spread of diphtheria and scarlet fever.

THE fifteenth annual meeting of the American Public Health Association will be held in Memphis, Tenn., November 8th, 9th, 10th and 11th. The following are the topics for discussion: First—"The Pollution of Water-Supplies"; second—"The Disposal of Refuse Matter of Cities"; third—"The Disposal of Refuse Matter of Villages, Summer Resorts and Isolated Tenements"; fourth—"Animal Diseases Dangerous to Man."

THE Western Pennsylvania Medical College at Pittsburgh began its second annual regular course on Tuesday, September 27th, with a class of near 100. The introductory address was delivered by the Secretary of the Faculty, Prof. W. J. Asdale. This college requires an entrance examination, and provides a three years' graded course.

NEWEST TREATMENT FOR WHOOPING COUGH.—Resorcin and cocaine sprays—two to eight grains cocaine to the ounce of water; resorcin, two to four grains to the ounce of water, the cocaine spray being used every two hours, the resorcin every three hours.

DR. LIEBERKUHN, Professor of Anatomy at Marburg, died recently at the age of seventy-five.

THERE have been eighteen deaths from Asiatic cholera in New York harbor during the past month. The republic of Mexico has declared cholera epidemic (!) in New York, and will enforce a rigid quarantine against all American vessels.

WHEN vaginal pruritus is found in an elderly patient, do not fail to examine the urine for sugar. Vain will be the use of antipruritics until the diet of the patient is regulated and other treatment instituted.

A BELGIAN oculist, Ignace Peczei, claims that he can diagnose all diseases and determine their etiology by examining the eyes. This reminds us of the American specialist who always examined the heart through the vaginal speculum.

M. FREUND has discovered that the coagulation of blood may be perverted by placing it in a vessel, the sides of which are covered with vaseline, and covering it with a film of oil.

PROF. ALONZO CLARK, M. D., LL.D., for many years connected with the College of Physicians and Surgeons, died in New York in September. He was in his eighty-first year.

TO GIVE QUININE.—Quinine given with dilute hydrobromic acid is more pleasantly received by many patients, its cerebral effects being much mitigated.

AN INDUCEMENT.—An Australian doctor advertises to pay one-half the funeral expenses in cases in which he is not successful.

ACCORDING to a writer in *Science*, every fifth person in the Texas grazing region is affected with the beef tape-worm.

A FRENCH writer has recently published, in a medical journal, an article on the "Physiology of Kissing."

Selections.

THE NINTH INTERNATIONAL MEDICAL CONGRESS.

That the many readers of *The Journal* may know the real character and success of the recent International Medical Congress in Washington, we copy the following leading article from the London *Lancet* of September 24, 1887, pp. 617 and 627. Certainly, no higher or more impartial authority could be invoked. *The Lancet* says :

“ The success of the Ninth International Medical Congress is a matter for thankfulness. The interruption of the series of congresses would have been little less than a calamity and a disgrace for the profession in all nations. Any serious imperfection in the meeting, either as respects numbers or the character of the discussions, would have been but little less unfortunate. But the Congress has been held under most honorable auspices ; the famous hospitality of the United States has been fully realized ; and those who went great distances to attend the Congress have been amply rewarded, and will return to their various countries and duties with higher impressions of their calling and deeper convictions of its progress, both on its scientific and its medical side. We cannot but rejoice that our own country was well represented in many of the Sections ; the names of many well-known English physicians and surgeons will have been noticed in the reports which were received by cable from our special correspondents at Washington. We confess that we read the report of the concluding proceedings of the Congress with the most pleasurable emotions, and, not least, the remarks of the English members. A break-down of the Congress in Washington would have been only a less acute pain to us than a break-down in London. And we accept the concluding speeches of our countrymen and of our *confrères* of Berlin and Paris, Dr. Martin and Dr. Landolt, and others, as proof that the Congress has been worthy of its predecessors, that it contained a larger gathering of foreign members than any of them, and that it is calculated to promote the advancement of our art. Those in the United States who have worked to this end, in spite of much discouragement, well deserve the gratitude which was accorded to them by formal resolution. We have purposely abstained, in our allusions to the Congress, from pointedly referring to the domestic differences

among our brethren in the States, which threatened to seriously mar the success of the Congress, if not to prevent it altogether. Those who persevered in spite of all opposition, and who have carried through the Congress so successfully, may well be satisfied. They have done a great service to their country and to their profession in all countries. It is not necessary for us to say that they committed no faults and made no mistakes. Such praise is not for mortals in a world so full of 'spilt saltpetre' as ours. But they have carried through the Congress, and we thank them. There is yet one other service they can do : in any official action that now devolves upon them, to strive to obliterate the last relics of discord, and to hand on the light of truth and charity, undimmed and unqualified, to those in Berlin, on whom will now rest the burden of responsibility for the next Congress. They can well afford to be magnanimous, and to help to make the representation of the States at Berlin so complete as to bear no traces of recent divisions.

"The scientific value of the addresses and papers read at the recent Congress cannot be estimated till we have seen them in full. On the whole, judging from abstracts of the papers and discussions, we are inclined to say that they have been practical rather than theoretical, and have had reference to useful rather than transcendental aspects of medicine. Neither, so far, have we met with much indication of original matter in the papers. But this is no dispraise. It was meet that in the most practical nation in the world papers and discussions should take a practical turn, and deal with questions at their practical point. No branch of medicine can be said to have been neglected, from that which deals with the brain to that which deals with the risks of decayed teeth ; including, by the way, several instructive cases of pyæmia. The statistics of vaccination were much advanced in a paper by Dr. Josef Kőrösi, Director of Communal Statistics of Buda-Pesth, (to which we hope to make more special reference,) and other questions of Public Medicine were made subjects of interesting discussion. Every branch of medicine was well represented—notably the ophthalmic, the gynecological, and the dermatological ; so that we venture to forecast that the volumes of the Transaction Reports will have considerable practical importance.

"Notwithstanding that the city of Washington is, like most other cities, liable to suffer an annual desertion by the most influential part of its population during the early autumn, the ninth meeting of the

International Medical Congress has been one of the most successful of its kind. We shall not err in saying that as a social undertaking merely, without regard to its professional aspect, this transatlantic gathering holds a place not second in importance to anything of a similar character that has happened, or is likely soon to happen, on this or that side of the dividing ocean. As an assemblage of medical practitioners and teachers, met together with a common purpose of comparing and correcting the results of observation and invention, of devising new plans for future investigation, and of applying new modes of treatment in the art of healing, its significance is equally remarkable. With the single exception of London, no European capital has attracted so many representatives of medicine and surgery since the international movement first originated. Successful in point of numbers, the conference has not been less successful in possessing in more than one particular a thoroughly representative quality. It has been, in the widest sense, international. Almost every civilized people, besides races which might by courtesy be included in the same category, have contributed towards its membership. The four continents have given of the skill which is available for the treatment of disease in their civil practice, the military and naval services have subscribed each its quota of men and of material for discussion. Again, as regards the subject-matter, it is almost superfluous to point out the illustrative diversities of study by which the sum of medicine can be viewed as through so many windows, and to state that each of these has received its full share of recognition in the working programme of the Congress. Last, but not least, the whole business and pleasure of this meeting have been administered with a cordial good fellowship truly representative of that spirit of hospitality which happily characterizes the American people, and annually admits to the privileges of free citizenship strangers out of every country without distinction. President Cleveland and his assessors in the work of government have been foremost in showing attention to the American practitioners and their guests. Not only have they taken an active part in the extra professional work of the Congress, but it is through their influence that government buildings have been on several occasions available for social gatherings of the members. We are happy to recall the fact that in so doing they have but revived the precedents afforded by the conduct of other States, but we appreciate no less on that account the

warmth of their generous consideration. Nor must we forget to offer an equal tribute of esteem to the American medical press, and to those citizens of Washington who distinguished themselves by affording a similarly handsome hospitality."

Inasmuch as the International Medical Congress of Washington has passed and been freely awarded a high and honorable position with its predecessors by the medical press of other countries, we desire to add only an earnest hope that the medical press of this country will accept the gratifying result, and instead of nursing old prejudices or seeking for imperfections and errors, to which all human beings are liable, will henceforth labor for the unity and advancement of the profession as a whole, and to secure an American representation in the International Medical Congress of 1890, at Berlin, as intelligent and honorable as came from the other side of the Atlantic to Washington in the Congress of 1887.—*American Medical Journal*.

INFANTILE CONSTIPATION.

One of the commonest complaints of childhood for which the physician is sought, is constipation. We find it at every stage of infantile life, and sometimes it is exceedingly obstinate. Day says, as causes, there may be :

1. Imperfect digestion and deficiency of glandular secretion from the mucous membrane of the intestinal tract.
2. Deficiency of nerve power, or want of peristalsis, more particularly in the large bowel. This condition is not unfrequently produced by the indiscriminate use of aperient remedies, or may follow a sharp attack of diarrhoea.
3. Dilatation of the intestine from debility, or from flatulent distention, or from fæcal accumulation.
4. Improper diet, as too little liquid food, or too much solid and indigestible material. Many of the patent foods for children, so largely used in the present day, fall under this category. Here may also be mentioned injudicious drugging with iron powders, carbonate of magnesia and the like.
5. Deficient secretion of bile (cold by checking the action of the liver) is a cause of constipation.
6. Malformations of the lower bowel, and painful conditions of the anus, as ulceration, fissure or eczema induced by ascarides, may

lead the child to avoid the act of defæcation and to produce habitual constipation.

In a word, most cases of constipation are due to a sluggish state of the muscular coat of the intestines, to a diminution of the secretion from the mucous membrane or liver, or to improper dietary.

These causes are largely common to adults also, while there are other causes not here enumerated.

A habit of constipation on the part of the nursing mother, not properly attended to, will induce constipation in the child, as will also the habit of purging by active physics. The administration of the pernicious patent nostrums, soothing syrups, cordials, etc., to the fretful child is a potent and serious cause of constipation, as by the influence of the opiates, which they all contain, upon the nervous system of the child, through which the constipation often comes, there is a permanent irritation established, which is sometimes life-long, and often continuing the constipation in spite of all agents not directed to the relief of the irritation.

That the condition of the nervous system is potent as a cause, is proven by the fact that after some prostrating fevers, where there has been great exhaustion of the nervous system, masses of feces have lodged in various parts of the intestinal canal.

This is especially true in chorea, and we know of one child whose mother boasted that she had fed it twenty bottles of Godfrey's cordial, and that no harm came of it, and yet the child suffered from a most intractable form of chorea for several years, and had not entirely recovered at the age of twenty-five years.

Non-attention of the parents of older children to the condition of the child's bowels, is a potent cause of constipation, many parents never inquiring whether or not the child ever evacuates the bowels.

The convulsions of childhood are often due to impacted masses of fecal matter in the bowels. It may be well to here state also some of the essentials of prevention and cure.

Reasoning from cause to effect, there would be attention to the digestion; to the ingestion of such diet as would be non-irritant and easily digested. If there is deficiency of peristalsis, mild massage of the bowels is often of most marked benefit. We have often advised rubbing the bowels slowly but continuously, after having lubricated the hand, from right to left across the gastric region, down the left side across the lower abdomen to the right side, and up the right side

around and around mildly but firmly. This method each morning for several mornings has often overcome a persistent form of the trouble.

All bad habits of the mother, if the child is nursing, must be corrected. It is the radical opinion of the writer that there is *no need of opium in any form* in the child. This may be making a bold assertion, but after several years having elapsed since he has prescribed a dose of the agent in any form, and only good results obtained, he feels justified in the conclusion. Opium is only productive of bad results in the child, and constipation is one of the least of these. Patent soothing remedies should be vehemently denounced; they are pernicious in the extreme.

The parent should cultivate a correct habit on the part of the child, insisting upon regular attention to the bowels at stated times; this will often obviate the difficulty.

But very few medicines should be given. We should study not what to give, but what not to give.

Cascara sagrada, in minute doses, may be given in cases where medicine is absolutely demanded, but it must be given with caution, and discontinued at the earliest moment; at the same time, none of the other measures advised should be neglected.—*Chicago Medical Times*.

THE TREATMENT OF SYPHILIS BY HYPODERMIC INJECTIONS.

Dr. Prince A. Morrow, in the *Medical Record*, gives the results of his observations on the treatment of syphilis by hypodermic injections of mercury, as practical in the male and female syphilitic hospitals of Paris—the Louraine and the DuMidi.

After describing the methods of treatment by both the soluble and insoluble mercurials, and the relative merits and disadvantages of each, and the claims made for each by their respective champions, he concludes with the following summary:

“The hypodermic use of mercury, in simplicity, convenience, scientific accuracy, rapidity of action and the development of a maximum effect from a minimum quantity, constitutes a decided improvement over the ordinary modes of introducing this drug into the system.

"The hypodermic method is not as liable to cause salivation, gastro-intestinal disorders and other toxic symptoms of hydrargyrisms.

"There is a remarkable unanimity of opinion as to its efficacy in suppressing the active manifestations of the secondary stage, and hastening their involution.

"The claim that the hypodermic use of mercury increases its potentiality and widens the range of its curative action, enabling it not only to subdue refractory secondary lesions, which visit ordinary treatment, but also tertiary lesions of syphilis, may be considered as yet *sub judice*. The claim that it endows mercury with a greater permanence of action, preventing relapses and preserving the patient from manifestations of the diathesis for a long period, is not proven.

"The more portentous claims that the hypodermic injection of twenty-five centigrammes of the bichloride, or forty centigrammes of calomel, cures syphilis, must be rejected as extravagant and absurd.

"The irritant action of mercury introduced subcutaneously, manifest in the production of pain and local accidents, renders its general employment in the systematic treatment of syphilis impracticable.

"Until these objectionable features be modified or overcome, the proper position of hypodermic medication in the therapeutics of syphilis is in the category of adjuvants.

"Its employment is indicated where the necessities of the case demand a rapid and intense mercurialization. In certain emergencies, where, for example, the integrity of an important organ is threatened, its prompt and energetic action renders it superior to other modes of mercurialization.

"In exceptional cases, marital syphilis, for example, where the exigencies of the situation demand secrecy in treatment with the speediest possible suppression of the symptoms, this method is to be recommended.

"In cases where gastro-intestinal irritation is so marked as to forbid the introduction of mercury to the stomach, it constitutes a most efficient reserve treatment.

"In tertiary syphilis, where the iodine idiosyncrasy is so marked as to preclude the use of iodide of potassium, the hypodermic use of mercury should be substituted.

"My own impression is, that while the hypodermic will never supplant the classic modes of employing mercury, yet it constitutes a decided acquisition to our therapeutical resources against syphilis, too valuable to be ignored or practically disregarded, as has been the case in this country."

THE PROMOTION OF PUERPERAL FEVER.

Dr. W. S. Playfair read, before the British Medical Association, a paper on the promotion of puerperal fever. In it, he made a statement concerning the general practitioners of England, which we think applies as well to those of America. "I doubt if, even yet, antiseptic midwifery is at all general in private practice." He believes that the monthly nurses, especially the older class, consider the antiseptic precautions as "new-fangled fads," and follow but the physician's directions only in the most perfunctory way. He, therefore, has a printed card which he gives to every nurse in attendance upon a case under his charge. We give a copy of it below. It may give many an idea which they will find profitable to put into practice :

ANTISEPTIC RULES FOR MONTHLY NURSES.

"1. Two bottles are supplied to each patient. One contains a solution of perchloride of mercury, of the strength of one part to 1,000 of water, tinted with litmus (called the one to 1,000 solution), the other, carbolized oil (one to eight).

"2. A small basin containing the one to 1,000 solution must always stand by the bedside of the patient, and the nurse must thoroughly rinse her hands in it every time she touches the patient in the neighborhood of the genital organs, for washing or any other purpose, before or during labor, or for a wash after delivery.

"3. All sponges, vaginal and rectal pipes, catheters, etc., must be dipped in the one to 1,000 solution before being used. The surface of slippers, bed-pan, etc., should also be sponged with it.

"4. Vaginal pipes, enema tubes, catheters, etc., should be smeared with carbolized oil before use.

"5. Unless express directions are given to the contrary, the vagina should be sponged daily after delivery with warm water, with a sufficient quantity of Coudy's fluid dropped into it to give a pale pink color.

" 6. All soiled linen, diapers, etc., should be immediately removed from the bed-room.

" N. B.—These rules are for the protection of the patient from the risk arising from accidental contamination of the hands, sponges, etc. It is, therefore, hoped that they will be faithfully and minutely adhered to."

These rules as they are, or varied to suit the ideas of the physician or the form of antiseptic used, might do a great deal to enlighten the many nurses in America who are totally ignorant of antiseptics.

FOLLICULAR TONSILITIS AND IDIOPATHIC PERITONITIS.

Dr. Fröhlich, in the *Deutsch Medicinal Ztg.*, No. 37, 1887, reports the following cases, which are of great interest, because they prove that follicular tonsillitis, which is usually regarded as a harmless disease, can become an object of great importance :

A military musician, L——, acquired a follicular tonsillitis; he had no fever, but the pulse was small and frequent, and the general health bad. The next day, temperature thirty-nine and one-tenth, pulse 108; meteorism and complaints of abdominal pains. There was also an enlargement of the spleen, rendering the condition like typhoid. But, next day, it was obviously seen that the man suffered from a peritonitis. In spite of energetic treatment with ice, calbmel and camphor and benzoin injections, the condition aggravated, the weakness increased and the patient died the next day. The post-mortem examination showed a simple peritonitis without perforation, œdema pulmonum and swelling of the tonsils, without, however, the presence of membranes. The affection was considered to be a simple peritonitis. During the post-mortem examination, the author cut himself in a finger, and, in spite of energetic disinfection, he was attacked the next day with violent lymphangitis and lymphadenitis of his arm; high fever, and very bad general condition. He also experienced pain in the pharynx, and examination showed a follicular tonsillitis. The next day, the wife of the author also suffered from a follicular tonsillitis, and the same day, an assistant, who had sown up the cadaver, and also wounded his finger, acquired a follicular tonsillitis. It was now evident there was a connection between the infection of the fingers and the tonsillitis, and that the tonsillitis was so infectious that the wife had

acquired it. It was nearly certain that the tonsillitis of the author and the assistant was caused by the peritoneal pus from the cadaver, and that both affections were caused by the same micro-organism. The author, his wife and the assistant were successfully cured. The author refers to some cases in literature of similar affections, but the connection is not so certainly established in any of these as in this case. Bacillary examinations were not made, because the musician had been already buried when the chain of events became interesting.—*Journal of Laryngology and Rhinology*.

Editorial.

HOW SHALL WE MANAGE THE PEDICLE IN SUPRA-VAGINAL HYSTERECTOMY?

While the question of the treatment of the pedicle in ovariectomy may be said to be already decided in favor of the intra-peritoneal method, not so with reference to its management in supra-vaginal hysterectomy, which is still under judgment. The two conditions differ so widely, both anatomically and pathologically, that it is difficult to understand how they could ever have been regarded as identical, or even analogous, as to the principles which should govern their management.

So much of success depends upon the technique of the operation in abdominal sections of the class which has for its object the excision of the pelvic organs of women, that it must necessarily be discussed in detail—point by point, item by item, step by step. At one time, it is the ligature, either as to its substance or the method of its application, which receives attention; at another, drainage, both as to its method and whether it shall be employed at all; and, again, the cautery becomes the theme of discussion—and so on unto the end of the long catalogue. It is only in this way that truth can be evolved, and so we reach the solution of great problems by this steady-going, siege-like process.

The chief sources of danger from the pedicle in the operation in question are: First, hemorrhage, and second, sepsis; and these are especially difficult to overcome, if the pedicle be short and thick. In these respects, the stump widely differs from the ovarian pedicle.

To prevent hemorrhage during the operation, Martin, of Berlin, throws an india-rubber tube around the pedicle, claiming that no blood need be lost, excepting that which is in the tumor itself; he then unites the stump, by excising the tissue in such a manner as to leave it cone-shaped, and drops the pedicle. This may be said to approach nearer to the ideal than the extra-peritoneal method of dealing with the pedicle, for it leaves the parts nearer restored to their normal relations.

Dr. George Granville Bantock has recently called attention anew to this subject in a paper read at the late meeting of the American Gynecological Society, detailing the improvements he has made in the management of the pedicle through a series of fifty-seven supra-vaginal hysterectomies treated by the extra- and five by the intra-peritoneal method. Of the former, forty-five recovered and twelve died; of the latter, one recovered and four died. This is a rare experience, and enables a man who can boast it to speak from the chair. He began his operations by severing the pedicle with the cautery according to Baker Brown, but the patient died from hemorrhage, and he never tried this plan again. He now employs Koeberlé's *serre-nœud* as modified by himself, using soft annealed iron wire to constrict the pedicle, which is tightened with the clock-key ratchet. If the wire is properly adjusted at first, it will rarely be necessary to tighten it again for four or five days, but should there be oozing at any time, a turn or two of the key will control it. He has even allowed two weeks to elapse before disturbing the dressings, especially if the stump remain dry, but always changes them whenever they become moist.

In one of his successful cases, he removed the pregnant uterus together with a fibro-cyst weighing thirteen pounds. In another case, his forty-fifth, he applied the *serre-nœud* just below the level

of the ovaries, partially tightening it, then included the broad ligament in long hemostatic forceps, thus securing the large vessels. The peritoneal covering of the uterus and tumor was then divided three inches from the wire loop and reflected towards the latter. Tightening the loop, the pins were inserted an inch from the wire, and a second constrictor was applied just behind the pins, after which the first was removed. This illustrates his method of gaining length in cases where the pedicle is short, and thus relieving the strain on the broad ligaments. He regards the treatment of the stump in supra-vaginal hysterectomy as a very different thing from that of the ovarian pedicle—a point which seems to be well taken.

Mr. Thornton's method of operating, including the treatment of the pedicle, does not differ materially from Dr. Bantock's, excepting in the employment of antiseptics. As is well known, the latter dispenses with Listerism, while the former carries it out fully, including the spray. Mr. Thornton also applies styptic iron powder to the stump, which Dr. Bantock thinks unnecessary.

The intra-peritoneal method may be said to be the favorite of the German school led by Martin and others, while the extra-peritoneal method is the usual one followed by the English gynecological surgeons. In America, most operators incline to the extra-peritoneal plan, believing that it is safer in our present light, and economizes time withal, an element of importance many times. This practice is likely to prevail pending the bringing forward of the yet-to-be-discovered ideal method, which Dr. Bantock very frankly admits has not, up to the present time, been accomplished.

ANNUAL REPORT OF THE DEPARTMENT OF HEALTH OF BUFFALO.

For the first time in the history of our city, a report of the transactions of the Health Department has been published in pamphlet form. It may seem strange to many of our readers that such a report was never presented in former years. The labor devolving on Dr. Briggs has been enormous: to compel

the registration of vital statistics, to provide a competent corps of assistants to enforce the health ordinances, and in a manner to educate both the people and the city officials up to the idea that preservation and promotion of the public health were really matters of as great importance as the lighting of streets or the introduction of natural gas.

Even now the Health Department has no adequate quarters for the transaction of business and the preservation of its records. The Health office is located in a corner of the City Clerk's office, indexes and records are filed away upon the floor, and the communications of the Health Officer are carefully stored away in a band-box; while park commissioners, assessors and even the coroners have offices of their own. Considering the disadvantages under which the Health Physician and his assistants have labored, we are surprised that so thorough and exhaustive a report has been compiled.

The Health Physician states in his report that the vital statistics show a larger birth-rate than any other city in the country. There was an *increase* in the number of births amounting to 696, marriages, 154; and a *decrease* in the number of deaths amounting to thirty-seven, as compared with the statistics of 1885.

Dr. W. H. Thornton contributes a report on the sanitary condition of the public schools, in which he shows that while the buildings recently constructed are in a fair sanitary condition, the older school-houses are in a deplorable state.

The City Chemist reports that of 267 samples of milk submitted to him for analysis, forty-nine or eighteen and thirty-five-hundredths per cent. were adulterated.

Of thirty-eight wells, the waters of which were analyzed, twenty-eight were condemned as impure, seven were passed, although the water was sufficiently hard to warrant condemnation under ordinary circumstances, and only three were found to contain wholesome drinking water.

Physicians will find the tables giving the death-rate from various classes of diseases for the six years from 1881 to 1886 inclusive, an interesting study, as they show how greatly particu-

lar classes of diseases vary in different years. On the whole, there has been a steady decline in the mortality from zymotic affections. There is also a report from Dr. F. R. Campbell on the "Relation of Locality to Mortality in Buffalo." This paper, which required an immense amount of statistical research, will be of great interest to the local physician. The tables are so arranged as to show the mortality from all causes, and from various zymotic diseases by wards, during the past six years. The various conditions affecting the mortality rate are also given. Taking the average mortality for six years, we learn from this table that the death-rate in the Ninth Ward from diarrhoeal diseases and diphtheria has been one and one-tenth and fifty-eight-hundredths per 1,000 respectively, while in the Fifth Ward the death-rate from these diseases was four and fifty-two-hundredths and one and eighty-six-hundredths respectively. The First Ward has had uniformly the highest death-rate from diphtheria, excepting in 1882 and 1883, averaging for the six years two and thirty-eight-hundredths per 1,000—nearly double the average for the entire city.

Dr. Edward Clark contributes a valuable paper on "The Milk Supply of Cities," and the City Chemist an article on "The Water Supply of Buffalo," showing that we are provided with purer water than the great majority of large cities.

. It is to be regretted that this report was not printed earlier in the year. Whether this delay was due to the negligence of the Health Officer or the public printer, we do not know, but it is certainly to be hoped that future reports will be published before they come to be classed among the antiquities of the city.

THE Buffalo Maternity Hospital, under the professional care of our editorial confreres, Drs. Lothrop and Frederick, has met with deserved success in this the second year of its work. It aims to provide a safe retreat for pregnant women, in which to pass their confinement and puerperal convalescence, under skillful obstetrical attendance, and with the most painstaking care and nursing. The institution meets a want long felt in this city,

providing from among our ablest physicians an attending and consulting staff, which commands the endorsement and support of the profession here and elsewhere. Its success in the treatment of the puerperal period, under the principles of modern antisepsis, confirms the confidence we have always reposed in their application to puerperal women. We commend this institution and its work to our numerous friends, assuring them that it deserves the confidence of the profession at large, both in its professional work, and in its honorable administrative and financial management.

WE desire to direct attention to the advertisement in this number of the JOURNAL, of Wampole's Extract of Malt and Compound Syrup of Hypophosphites. These remedies have been largely used in our practice for several months, and the confidence, at first limited in their efficacy, has been augmented until they are now found among the reliable agents in our armamentarium medicum. The extract of malt combines the diastatic principle of the malt with the tonic qualities contained in porter, and makes an excellent remedy in feeble digestion, especially in cases which fail to digest the starchy foods.

The Compound Syrup of Hypophosphites is similar to Fellows', and much cheaper and equally reliable. We commend these new preparations to the profession, assuring them of their reliability.

DR. F. A. HARRINGTON, of this city, has been appointed Assistant to the Chair of Materia Medica and Therapeutics in the Medical Department of Niagara University. Dr. Harrington is a thoroughly educated man, being a graduate of both the academic and medical departments of Harvard University, and was for one year resident physician in the Boston Lying-in Hospital. In 1886, he received the degree of A. M. *cum laude* from his *alma mater*. Dr. Harrington is to be congratulated on having his abilities recognized by the profession so early after entering upon his practice in Buffalo, and the Medical Faculty

of Niagara University has done well in thus filling the subordinate position with a young practitioner of such thorough preliminary training.

CORRECTION.—In our editorial on the American Gynecological Society in the October number, the proof-reviser made us say "negotiated," whereas we wrote "negatived," in speaking of the society's action upon the proposition to join the congress of special societies. This society rejected the offer.

Book Reviews.

A System of Gynecology, by American Authors. Edited by MATHEW D. MANN, M. D., Professor of Obstetrics and Gynecology in the Medical Department of the University of Buffalo. Vol. I. Illustrated with three colored plates and two hundred and one engravings on wood. Philadelphia: Lea Bros. & Co. 1887.

This work is worthy of the commendation of the profession, which it has already received from so many sources. The contributors are all men of distinction in the profession. It is especially acceptable, as it is a well-known fact that this branch of practice far excels in this country. The volume contains articles, by the editor, on "Diseases of the Vulva." These important subjects are well presented. This and the labor of editing, which is no small one, are performed in such a way as to reflect great credit on our fellow-townsmen. The articles of Dr. Jenks, on the "Historical Sketch of American Gynecology;" "The Development of the Female Genitals," by Henry J. Garrigues;" "The Anatomy of the Female Pelvic Organs," by Henry C. Coe;" "The Malformations of the Female Organs," by Henry J. Garrigues;" "Gynecological Diagnosis," by Egbert H. Grandin;" "General Consideration of Gynecological Surgery," by E. C. Dudley;" "General Therapeutics," by Alexander J. C. Skene;" "Electricity in Gynecology," by Alphonse D. Rockwell;" "Menstruation and its Disorders," by W. Gill Wylie;" "Sterility," by A. Reeves Jackson;" "Diseases of the Vulva," by Mathew D. Mann;

"The Inflammatory Affections of the Uterus," by C. D. Palmer; "Subinvolution of the Vagina and Uterus," by Thaddeus A. Reamy; "Periuterine Inflammation," by Richard B. Maury; "Pelvic Hæmatocele and Hæmatomata," by Ely Van De Warker, are well and concisely written. By reading the titles of the articles, it will be seen that the first volume is of great value in this most important department of medicine. We congratulate the publishers on the most excellent production.

A Treatise on Diphtheria. Historically and Practically Considered; including Croup, Tracheotomy and Intubation. By DR. A. SAMIE, Docteur en Médecine Ancien des Hôpitaux de Paris, Membre de la Société Anatomique, etc. Translated, annotated and the surgical anatomy added; illustrated with a full-page colored lithograph and many wood engravings, by Henry Z. Gill, A. M., M. D., LL.D., late Professor of Operative and Clinical Surgery in the Medical Department of the University of Wooster, at Cleveland, O., Member of the American Medical Association, etc. St. Louis, Mo.: J. H. Chambers & Co. 1887.

This book has attracted great attention from the profession, "taking," as it does, "every feature of the subject under consideration, tracing its history down through the centuries, the clinical observations, the pathological manifestations; microscopical and clinical examination and its inoculation." The translation is excellent, as those who have the work in the original can testify. The anatomical addition is in keeping with the rest of the work. As one reads, he becomes infatuated with the work, and many of the points which were not made clear by the writings of Bretonneau, Trousseau, and other writers, are settled here. It is not too voluminous for any practitioner, and every word seems necessary. The book is excellently illustrated with forty-one wood cuts.

Nervous Diseases and their Diagnosis. A Treatment upon the Phenomena Produced by Diseases of the Nervous System, with Especial Reference to the Recognition of their Causes. By H. C. WOOD, M. D., LL. D., member of the National Academy of Science. Philadelphia: J. B. Lippincott Company. 1887.

The extensive experience which Dr. H. C. Wood has had in the nervous clinics of Philadelphia, pre-eminently fits him for the work he has undertaken. The introduction, which is a general discussion of disease and of neurasthenia, is very interesting and

instructive. The next subject, that of paralysis, detection of paralysis, functional palsies, organic palsies, etc., is a very exhaustive and yet concise treatise on this subject. Sixty pages are devoted to it. The following chapters on "Motor Excitements," "Reflexes," "Disturbances of Equilibration," "Trophic Lesions," "Sensory Paralysis," "Exaltations of Sensibility," "Disturbances of the Special Senses," "Disorders of Memory and Consciousness," "Disorders of Consciousness," and "Disturbances of Intellection," are equally well written. As will be seen, the book takes up subjects little understood by the profession. They are treated in such a manner as to prove interesting reading. This work fills a long-felt need in this department.

A Reference Hand-Book of the Medical Sciences, embracing the Entire Range of Scientific and Practical Medicine and Allied Science. Illustrated by chromo-lithograph and fine wood engravings. Edited by Albert H. Buck, M. D. Vol. V. New York: Wm. Wood & Co., 56 Lafayette place. 1887.

The fifth volume of this magnificent work has come to hand. It covers the subjects which, under the alphabetical arrangement followed, fall between Mil. and Pot. In every respect, this volume equals its predecessors. The illustrations are many of them new, and are sufficiently abundant. The subjects are treated, in almost every case, in a way which shows the hand of a master, and a reference to the author usually gives the name of some distinguished writer. The complete work bids fair to be the most valuable compendium of the science of medicine, especially for the practitioner, ever issued in any language.

Proceedings of the American Society of Microscopists. Ninth annual meeting, held at Chautauqua, N. Y., August 10-13, 1886.

The annual volume of proceedings of this society have in the past contained many valuable articles, and the present issue is fully equal to its predecessors. We are glad to note that Buffalo is so numerous and ably represented. Profs. Geo. E. Fell, M. D., and D. S. Kellicott, Dr. Geo. W. Lewis, and Messrs. Ward and Henry Mills, contribute excellent papers. A most admirable paper, by Hamilton Smith, LL.D., entitled, "A Contribution and the Life History of the Diatomatacea," is illustrated by a series of beautifully-colored plates.

Differential Diagnosis of the Diseases of the Skin, for Students and Practitioners. By C. W. CUTLER, M. S., M. D., Assistant Attending Physician for Skin and Venereal Diseases, New York Hospital. New York and London: G. P. Putnam's Sons. 1887.

In this little book of 140 pages, the author presents, in tabulated form, the characteristic symptoms of such skin diseases as are most liable to be confounded one with another. We think the general practitioner will find the book of real service in enabling him to make a certain diagnosis in many cases which at first view may have puzzled him, and the student will find it a convenient aid in preparing for examination.

The Physician's Visiting List for 1888. Thirty-seventh year of its publication. Philadelphia: P. Blakiston, Son & Co., 1,012 Walnut street.

The receipt of this list reminds us that another year is almost upon us. The "old favorite" is usually the first in the field, and will, in a few weeks, be followed by a score of others, but in professional favor, "Lindsay & Blakiston's List" still holds first place, and bids fair to retain that position for a long time to come. The publishers spare no efforts to make it the best list in the market.

Manual of Clinical Diagnosis. By DR. OTTO SEIFERT and DR. F. MUELLER. Third edition, revised and corrected. Translated, with the permission of the author, by Wm. B. Canfield, A. M., M. D., Lecturer on Histology, etc., University, Maryland, with sixty illustrations. New York and London: G. P. Putnam's Sons. 1887.

This valuable little work gives, in an epitomized form, the different methods of clinical examination, as well as a convenient collection of those data and figures which are most valuable in every-day work. It is a book admirably adapted to the practical need of the physician and student, and we would most heartily commend it.



VOL. XXVII.

DECEMBER, 1887.

No. 5

Original Communications.

*A STUDY OF SOME OF THE RECTAL DISORDERS OF PREGNANT WOMEN.**

By EDWARD CLARK, M. D.,

Demonstrator of Anatomy, etc., Medical Department, Niagara University.

Some time ago, I informed the Secretary of the Obstetrical Society, that, to-night, I would present a paper on "Hemorrhoids in Pregnancy," and a notice to that effect appears in the little pamphlet which has been issued to the members of this Club. After due consideration, I reached the conclusion, that the subject chosen was not comprehensive enough to enable me to write much concerning it that would interest the members of this Society. I have, therefore, taken the liberty to prepare a short paper on "Some of the Rectal Disorders in Women," not with the view of presenting anything new or original in this important field of study, but simply to refresh our minds by the discussion of certain affections, as they occur in females, many of which are, to a greater or less degree, caused or aggravated by the puerperal condition. The frequent occurrence of rectal diseases, and the undue amount of suffering and misery induced thereby, should serve to enkindle, in the mind of every intelligent

* Read before the Buffalo Obstetrical Society, September 27, 1887.

and conscientious physician, a desire to understand their pathology and treatment, but, unfortunately for himself as well as his patient, the general practitioner is not very fond of exploring the rectum. I say unfortunately for himself, for the reason that, in many cases, a physician has lost not a little well-earned reputation by failing to make a diagnosis, because he did not avail himself of the information which he might attain by a careful rectal examination. Many an unfortunate being has been allowed to suffer for weeks, months, or, perhaps, years, on account of mistakes in diagnosis, which might have been avoided by a careful exploration of the lower bowel. A striking illustration of this statement is found in the following interesting case, reported by Dr. Griffith in the *Edinburgh Medical Journal*, which I take the liberty to quote in full :

“ Mrs. G——, *act.* twenty-five, mother of three children, the last being about four months old when I was first in attendance. I was called up to her on the night of June 18, 1876. She was suffering acute pain in the left side, which she could endure no longer. On examining the abdomen, I found a hard, irregular, exceedingly tender tumor, from which she was enduring great agony, and which was almost as large as an infant's head. I made no further examination that night, contenting myself with ordering her one-half grain morphia suppositories, to relieve not only the pain, but likewise the tenesmus and the passing of mucus. The discharge from the bowels was quite fluid, but distinctly fæcal; occasionally, a scybalous mass making its appearance. Next day, the morphia having taken good effect, I examined with the finger by the vagina, but could make out neither ovarine or uterine tumor. The sound *in utero* enabled me to make certain that there was no intra-uterine growth; but movement of the uterus, with the sound in the interior of it, was attended with the movement of the mass, which I found lay outside of the womb, yet connected to the left and upper portion of it—in fact, attached to it. I gave it as my opinion, that whatever the mass was, it was outside the uterus, and was adherent to it, and that it was not ovarian. I did not, however, express the opinion, at

which I arrived after the above examinations, and after thoroughly exploring by the rectum, viz., that it was a case of impacted and accumulated fæces, which, having set up great irritation, had occasioned inflammation, effusion of lymph, and matting or glueing of the bowel to the left and upper portion or cornua of the uterus, that organ being still enlarged, its involution after delivery being not yet completed, probably owing to the irritation, inflammation, and subsequent adhesion to which I have referred. Taking this view of the case, I purged freely and continuously for some days, till at length, after the lapse of six weeks, I had the satisfaction of hearing from my patient, (for I did not attend her continuously during the period,) that the tumor was all gone, and she was quite well—facts I verified by careful manipulation when she last visited me. The iodide of potassium had been combined with the aperients, as had also anodynes—the former in hope of dissolving adhesions, the latter with a view to ease pain. I would add, to show the difficulties which sometimes behedge the diagnosis in these cases, that this patient had previously had pronounced to her, by three medical men, that operation alone (gastrotomy) could do her any good, and of this she had a mortal dread, so that, all through, I buoyed her up with the hope that the knife might never be required. The swelling had commenced to be noticed about twelve or fourteen days after the birth of her child, was chiefly confined to the left side, though sometimes it seemed to enlarge and extend higher up and across the middle line toward the right, and was so large, that it was as though she was at her full time, and, when walking even across her room, she required a towel to support the abdomen; at other times, it would subside, preserving, however, the same shape; these alterations in size were synchronous with the action of the bowels, and gave me a valuable clue. The agony had been very great, and she told me nothing had relieved her for any length of time till she had used the morphia suppositories. At no period was there a discharge of matter indicative of any internal abscess; nor any flux of water, either into the abdominal cavity, or into the bladder, or any way externally, which would demonstrate the

existence and rupture of an ovarian or other cystic growth; therefore, the only diagnosis at which I could arrive, was that the bowels had become blocked during the confinement period, and had not emptied themselves fully; that an accumulation occurred and became greater and greater, being, however, occasionally partially lessened by the aperient action of the bowels themselves, which accounted for the diminution of, and subsidence that had been noticed in the swelling."

I have quoted this case in full, on account of its very interesting character, and also to show what may be accomplished in such cases by a thorough rectal examination. Here was a woman consigned by three medical men to all the dangers of gastrotomy, because they failed to make a correct diagnosis, I believe, for the reason that they did not make a sufficiently careful rectal exploration. At this critical point, a surgeon comes in, and relieves the patient of all her anxiety, and cures her in a few weeks. He possesses a "mind imbued with the true professional spirit," and has no more scruples against entering the rectum of his patient than the average gynecologist or obstetrician has against entering a woman's vagina. Many cases, similar to the one here reported, might be cited to prove that physicians do not, will not, or cannot, make a proper rectal examination. I can call vividly to mind a case of ischio-rectal abscess, which I saw, a few months since, at the U. S. Marine Hospital, at Stapleton, Staten Island. The man was reduced almost to a skeleton by reason of chills, sweats, hectic, and the excruciating pains which he had undergone while under the care of a private practitioner, who never made a rectal examination in his case, although the patient continually referred his trouble to that organ. The man entered the hospital in an extremely nervous, debilitated condition; a rectal examination was made, and the difficulty at once recognized. This man believed that he was suffering from cancer. A short time ago, a physician of this city related to me an account of a case of ischio-rectal abscess, which he saw in consultation with another practitioner. This patient complained constantly of pain in and about the ano-rectal region, had chills, sweats, etc., yet no rectal

examination was made. The case went on from bad to worse, and still no diagnosis, until at last, about the time my informant saw the patient, a perineal fistula had formed. Nature had succeeded in finding an outlet for the pent-up matter, but not until the patient's system had become so much contaminated with septic material, that efforts at recuperation were vain; the unfortunate patient soon being released from his sufferings by death from pyæmia, with all its concomitant phenomena. I trust I may be pardoned for this digression from my subject proper, but it seems necessary to relate some cases to substantiate my assertions relative to the indifference and carelessness of physicians, as regards the diagnosis of rectal affections.

Among the many rectal disorders, which are, more or less, influenced by pregnancy and parturition, may be mentioned hemorrhoids, fæcal fistulæ, ulceration and stricture, and neuralgia of the rectum—or irritable rectum, as it is sometimes called.

A word or two concerning some of these affections is all that the scope of this paper will allow.

Every physician is well aware that hemorrhoidal tumors are quite common in the latter months of pregnancy, and that they frequently give rise to a vast amount of discomfort. When of large size, they sometimes become strangulated, and the excessive pain thus produced has been known to cause abortion. These piles in pregnancy are produced largely by the pressure of the gravid uterus on the pelvic veins, and the constipated condition usually found in the pregnant state. The veins of the pelvis are also normally much more engorged with blood during gestation than at other times. The extreme tension to which these hemorrhoidal growths are sometimes subjected by pressure, combined with constipation, may cause them to bleed. This, of course, brings temporary relief to the patient, but you will sometimes meet with cases in which a large rupture has occurred in the vessels composing the growth, from which an increasing and sometimes alarming hemorrhage may occur, which may greatly lower your patient's vitality, and expose her to the various nervous and other derangements consequent upon the anæmic condition,

unless prompt measures for the arrest of the hemorrhage be instituted. Many women, in the later months of gestation, are troubled, more or less, with irritability of the bladder. This, of course, is due, in a large number of instances, to the pressure exercised, the enlarged uterus; and I believe that many physicians are prone to recognize this as the only cause of vesical irritation late in pregnancy. If your patients are carefully questioned on this subject, many of them will admit they are suffering from constipation and hemorrhoidal growths, the existence of which they have kept concealed from their medical adviser from motives of false delicacy. Many women have been treated in vain for this vesical tenesmus, for the reason that its cause, the hemorrhoids, has been ignored, while vigorous therapeutic measures have been resorted to, to remove what is only a symptomatic or reflex phenomenon. Every practitioner is well aware of the irritable condition of the bladder, accompanied sometimes by urinary retention, which follows on abnormal growths and operations in the ano-rectal and perineal regions; and, unless one has his eyes open to the fact, he will be found frequently treating the effect, and ignoring the cause.

In the pregnant female, external hemorrhoids are much more frequently met with than internal, and the treatment, aside from occasional incisions, is largely dietetic and medicinal. Internal hemorrhoids, which bleed or become prolapsed and strangulated, demand surgical interference for their relief and cure. For the internal bleeding pile, nothing, perhaps, answers better than the occasional application of nitric acid. I do not think I would hesitate to operate on a pregnant woman with large prolapsing hemorrhoids, for, other things being equal, I do not think premature labor would follow the operation any more frequently than it would result from the irritable and painful hemorrhoids, if left undisturbed. For the large prolapsing hemorrhoids, I would resort preferably to the clamp and cautery operation which has been so successful in the hands of my friend, Dr. Kelsey, of New York; or the method of crushing, advocated by Pollock, and now extensively practiced by Allingham. I have a very high

opinion of the method of exsection, recently so ably advanced by Whitehead, and I believe it would be a most eligible procedure in these cases, but, as yet, I have had no experience with it. I prefer the operative procedures above named to the ligature, and injections of caustics, astringents, etc., for the reasons that, as a rule, I believe they are followed by much less pain and reflex disturbance. Moreover, the method of treating hemorrhoids by injection is not, in my opinion, a very scientific operation, and while, perhaps, in a few selected cases, it is productive of favorable results, its indiscriminate employment by many who now resort to it is prolific of much mischief. A few words concerning some of the other affections named. Of fæcal impaction, which occurs not infrequently in pregnancy, I shall say nothing, for the case I have quoted in full from Dr. Griffeth, embodies all that is most interesting in the study of that condition. Ulceration and stricture occur more frequently in women than in men, but just how much etiological importance is to be attached to maternity in these conditions, is not fully determined.

Brodie, Allingham, Curling, Molliere, Kelsey, Van Buren, and other good authorities on rectal diseases, recognize the fact that a bruising of the rectal wall, between the child's head and the sacrum, produces a traumatism, resulting, sometimes, in stricture and ulceration. Many authorities seek to explain, in this way, the greater frequency of ulceration and stricture in the female sex. Van Buren says: "I had once, in my wards in the New York Hospital, a healthy, respectable woman of thirty-five, with an extensive surface ulceration surrounding the gut, for two or three inches above the sphincter, which followed a long, hard labor. The ulceration finally got well, but its cicatrization resulted in the formation of a stricture. This case left in my mind a very strong impression, that the constant liability to injury, sustained in this way, must go far toward explaining the greater frequency of ulceration and stricture of the rectum in women."

Brodie mentions such cases in his writings, and Curling gives a table of twenty-eight cases of stricture of the rectum,

twenty of which were in women, and in nine of them the disease commenced after labor, in some instances being distinctly attributed to an injury at that time. Undoubtedly, in the majority of cases in which ulceration and consequent stricture follow a prolonged, hard labor, there is present in the patient some accessory cause, in the shape of anæmia, or the strumous and syphilitic diathesis, which prevent a prompt repair of the solutions of continuity, produced by a difficult parturition.

The processes of repair in a healthy, robust woman, are generally so active, that a prompt recovery soon follows any bruising of the rectal walls, as well as of other parts, while in one who is weakened by any of the abnormal conditions above named, the process of repair is retarded to such an extent, that the patient is exposed to that chronic ulceration and inflammation of the mucus and sub-mucous areolar tissues of the rectum, which sooner or later ends in the formation of stricture. These changes, together with the contractions caused by the healing of ulcers, are recognized as the principal pathological factors in producing this affection. Fibroid tumors of the uterus, both intra-uterine and those which have been extruded into the vagina, may cause ulceration and stricture by pressure on the rectum.

Prolonged pressure from the child's head in protracted labor, may cause a complete loss of vitality, resulting in sloughing of the rectal wall at some points, thus producing another affection occasionally met with, viz., fæcal fistula, which I shall treat of very briefly. These fistulæ are less frequently met with than the urinary, and several varieties are described in the text-books. The most common form is the recto-vaginal, and the only one that concerns us in a paper of this character. In addition to pressure from the foetal head, we must recognize badly-fitting pessaries, and the improper use of instruments during delivery, as among the etiological agencies of this form of fistula. Perhaps, the most common, and frequently the only, symptom which admonishes the patient of the presence of this disagreeable malady, is an offensive discharge from the vagina. The quantity will, of course, depend to a certain extent upon the size of the fistulous opening,

but, be it ever so small, the poor patient's existence is a wretched one, indeed, owing to the very offensive odor; the presence of which debars her, to a great extent, from entering into many of the social enjoyments of life. Fortunately, this disagreeable affection is very amenable to the resources of surgical art, and the unfortunate sufferers may easily be relieved of a condition which, to all women of delicate and refined feelings, must be a heavy cross to bear, rendering them, as it often does, repugnant to their friends, their families and themselves. One can scarcely fail in making a proper diagnosis of the affection. The presence of the fistulous opening can generally be determined by a visual examination alone. Should this fail, the rectum may be filled with milk, or some artificially-colored fluid, and its escape into the vagina will reveal the location of the diseased spot. Spontaneous recovery sometimes occurs in these cases, but it is not always wise to wait for this result, when the simple operation of denudation and suturing is almost absolutely certain to effect a cure in the large majority of cases.

Before operating, the bowels should be thoroughly emptied by cathartics and an enema, and the sphincter ani muscle should be temporarily paralyzed by forcible stretching with the fingers. The bowels should be confined for a week or more after operating, by means of opiates, and, when first allowed to move, laxatives or an enema should be used, to prevent too much tension on the newly-healed wound.

*THE THERAPEUTIC VALUE OF SOME MEDICINES
IN THE TREATMENT OF HEMORRHAGIC
CONDITIONS OF THE UTERUS.*

By C. D. PALMER, M. D., Cincinnati.

Professor of Obstetrics and Gynecology, Medical College of Ohio; Obstetrician to the Cincinnati Hospital.

The author, in a paper read before the American Gynecological Society, said, in the abstract, as follows:

Among the medicines which time and experience have proven to be the most useful in the treatment of menorrhagia and

metrorrhagia are ergot, digitalis, canabis indica, bromide of potassium, arsenic and gallic acid. No one of these is more frequently prescribed, and with better success, and is better understood, than ergot. It is curative in some cases, benefits many, and may aggravate a few. It is singularly adapted to the relaxed muscular fibres, dilated and engorged blood-vessels. Chronic hyperæmia, of an active or passive kind, chronic metritis, in its first stages, and sub-involution, which are attended by increased menstrual flux, or hemorrhage, are controlled by ergot. The more soft, flabby and succulent the uterus is with blood, the better the ergot will act. The treatment of uterine fibroids, between the well-earned claims of galvanism and the fully-tested powers of ergot, the field of laparo-hysterotomy is destined to be greatly and very properly limited.

Digitalis, in proper cases, in good form, the infusion, is a remarkably reliable agent in cases properly selected. It is temporarily beneficial in uterine hemorrhages, resultant on cardiac disease, mitral insufficiency, and may result in a cure in other cases. An atonic condition of the circulation, a weak heart, with slow or rapid action, low arterial tension, may be combated by digitalis instead of ergot.

Cannabis indica is a more uncertain drug. It varies much in its strength and in its action, in different persons. It stimulates the cerebro-spinal and sexual centers, exciting uterine contractions. Its mode of action is not well understood, its indications are imperfectly defined, and its effects uncertain and unreliable.

Bromide of potassium, for certain menorrhagic states, is a remedy of no mean power. It acts as a sedative to the sexual apparatus, especially the ovarian functions, and, theoretically, we would expect it to be most efficacious in conditions of sexual excitement, ovarian irritation and congestion. Clinically, the theory has been found to be a fact. For the menorrhagia of ovarian, rather than uterine, origin, it is to be chosen. For the hemorrhage of sub-acute and chronic pelvic peritonitis, it is our best remedy. It is very possible that the bromide is more certain in its effect in arresting menstrual than non-menstrual hemorrhage.

Arsenic, on the other hand, has its influence directed more particularly to the uterus. Not prompt in action as ergot, digitalis and the bromides, yet, in selected cases, it is none the less decided. Arsenic, in medicinal doses, acts as a tonic and stimulant, improving bodily nutrition, with a special direction to the skin.

It is now considered to have a very similar effect on the mucous membrane to that on the skin, the morbid conditions of which are much the same.

Chronic endometritis, of long standing, with or without fungoid degeneration, expressing itself by a stubborn leucorrhœa and metrorrhagia, the causative relation of which is seemingly constitutional, rather than local, is often materially improved by long courses of arsenic; in the lymphatic temperament, and in constitutions of the blonde type, arsenic is apparently most inefficacious.

My general experience enables me to speak very highly of arsenic in two forms of menorrhagia: that of growing girls and young women, nullipara chiefly, in whom menstruation is not necessarily too free, but appears too frequently and continues too long; a vicious habit of irregularity of menstrual function, from some cause, becomes established, highly detrimental to the health. Small doses of Fowler's solution, gtt. III., continued during the interval, as well as the menstrual period, has rarely failed, in his hands, to correct the irregularity. The other class is the menorrhagia of the climacteric, either as to the time, quantity or duration. In this, it is not so successful, as, unfortunately, this is often due to some malignant disease. Arsenic is a good remedy in menorrhagia of malarial origin, as also in chorea, associated with menorrhagia in growing girls.

Gallic acid is the best of the astringent class, and is quite efficacious in restraining hemorrhage, resultant on uterine atony. Its disagreeable taste, and bad effect on the digestive functions, must limit its use.

Of the power of active cathartics, especially the so-called chologogues—mercury in particular—in promptly checking, at

times, uterine hemorrhage, all observing practitioners must attest. Such medication is indicated in menorrhagia of hepatic or splenic origin. Unload the portal circulation, and we relieve the pelvic engorgement.

Iron, as a rule, promotes pelvic congestion, and its use, in these cases, is almost invariably injurious. An increased and perpetuation of a normal and abnormal uterine flux, as a result of a hydræmic state of the blood, lacking power of spontaneous hæmostasis, offers a condition in which the muriated tincture of iron is highly beneficial.

Viburnum prunifolium is recommended in systemic cases, and dysmenorrhœa associated with menorrhagia.

Hydrastis canadensis is reported upon very favorably by Schatz, of Rostock, and Slaviansky, of St. Petersburg. It is considered, by these authorities, to be a vaso-constrictor of congested states of congested mucous membranes. In menorrhagia, from whatever cause, in hemorrhages, due to metritis, endometritis, myomas, incomplete involution, they have found it invaluable.

Gossypium herbaceum, after extensive trials in all forms of uterine hæmorrhage by Dr. Henry Garriques, has been found quite efficacious. He relieved 125 out of 139 patients. He gives it in a decoction, and has found it preferable to all other remedies in a majority of cases, the effects being most noticeable in neoplasm.

Hamamelis virginica is a drug which is entitled to a higher position among our therapeutic remedies than it has occupied. I think it superior to *viburnum*, *hydrastis*, *gossypium*, and, in some cases, to *ergot*. It does not seem equally potent for all kinds and conditions of uterine hemorrhage. For the sudden outburst of a flow, for active, profuse hemorrhage, it is inferior to *ergot*. For a slow and long-continued hemorrhage, when the blood is dark and venous, and the hemorrhage is passive in character, a symptomology indicative of passive engorgement and relaxation, it is a remedy par excellence. These are conditions ever present in flabby, enlarged, sub-involuted uteri, after delivery and abortion, also in some forms of chronic endometritis, before or after the removal of fungosities, and in chronic

retro-version, some fibroids, etc. I have been pleased with the effect of hamamelis on hemorrhage in several cases of papilloma of the bladder. The so-called Pond's Extract, a preparation of hamamelis, and a colorless, distilled product, are unworthy of confidence. The best preparation is the officinal fluid extract, in doses of a few drops up to two drachms. Small doses, often repeated, are recommended, but large ones should be used when decided effects are urgent. Hamamelis is somewhat tonic and sedative, slightly astringent and decidedly hæmostatic. The virtues of the drug cannot reside alone in the tannic and tallic acids which it contains, for equal quantities of the astringent fail to produce similar results. Hamemeline has been extracted from it, but whether this represents the chief active ingredient, is uncertain.

In endeavoring thus imperfectly to outline the especial fields of usefulness of these medicinal remedies, which may be depended upon in uterine hemorrhages, nothing should be so construed that a single one of the number ought to supersede local, mechanical and surgical interference when indicated. Occasionally, general medication alone will suffice more often; it goes hand in hand with other management.

CONCERNING THE TREATMENT OF BUBO BY EXTIRPATION OF THE GLANDS.

REFERRING ALSO TO A CASE OF GANGRENE OF THE SCROTUM
FOLLOWING AN OPERATION FOR THE RADICAL CURE OF
HERNIA.

By W. H. HEATH, M. D.,

Surgeon to the Sisters of Charity Hospital, Buffalo, N. Y.

The treatment of bubo depends upon whether the condition be acute or chronic. To the latter condition, which may be a sequel of an acute process, or indolent and slow from its incipency, reference alone is had.

Irrespective of the character, duration or intensity of the venereal irritation, or of the influence of constitutional condition,

These tumours are of primarily glandular or connective tissue origin, and present one of the following conditions, and may be classified:

1. **Primary nodular areas** with unformed or partially formed nodules in which are found one or more nodules, the result of a consequence of suppuration and the resulting destruction of tissue.

2. **Secondary nodular enlargements**, composed of a nodular area of hyperplasia and breaking-down of the nodules, the nodules being indurated and suppurative, the surrounding tissue being matted and the nodules being of watery-like or baggy-like appearance, with numerous openings.

3. **Secondary nodular enlargements**, and which may be of the nodular enlargements, only differing from the nodules in the perceptible breaking-down or breaking-up of the nodules of surrounding tissue.

4. **Secondary nodular enlargements** with both these conditions, the result of the strong influence of heavy treatment, the frequent implication of the

ligament, and the occasional (as in some venereal disease.)

(As old, indurated, granular, sinuous tract found as a sequel of the above.)

As serpiginous buds, in my experience, the glandular induration accompanying the initial secondary stage of syphilis, and the different conditions, with possibly few exceptions, a removal of the indurated glands, a process of great danger. It is possible the advanced treatment, but possibly a more frequently happens, with a little more do so again, and the result is a fluidity.

Alcers, even of the

cartilage knife, and all detritus removed, undermined and everted edges clipped away with scissors, and granulation from the bottom induced on a fresh and healthy basis.

Those inflammatory enlargements, composed of breaking-down, hyperplastic glands and peri-glandular connective tissue, require radical treatment. The sinuses should be laid open, and every affected gland removed, shreds and broken-down tissue scraped or clipped away, every burrowing pocket opened out, after which the cavity should be thoroughly cleansed, and dressed with a stimulating and antiseptic dressing.

When they come under treatment at an earlier stage, as a mass of hyperplastic glands, without involvement of the adjacent tissues and no evident suppuration, in the majority of instances the same line of treatment will be found the most satisfactory. In these cases, the general practice of using compression, absorbents, counter-irritants, injections of carbolic acid, iodide of potash, and other substances (a painful and disappointing method), while successful and efficacious sometimes, as often fails, suppuration setting in as a result of, or in spite of the treatment, rendering extirpation even then the best method.

Examination of these glands when removed under the conditions stated, show some in a state of induration, others enlarged by newly-formed tissue, and containing one or more points of softening, evidence of a series of interrupted irritations extending over some period of time, altogether a condition more apt to go through a tedious process of disintegration and slow discharge, than absorption under any mode of treatment.

Old sinuses should be handled as in other situations, laid freely open, their surfaces stimulated or changed by scraping or caustic, and packed to heal from the bottom. In these cases, it is sometimes necessary to dissect out a puckered mass of hard cicatricial tissue. Good results may occasionally be obtained by dilating with tents, scraping and packing with glycerine.

Slow serpiginous ulceration is often remedied by completely dissecting out or scraping the ulcer, and starting the reparative process afresh, constitutional treatment always being persisted in.

True syphilitic bubo, by which is understood the adenopathy co-existing with the initial lesion and second stage of syphilis, requires no local treatment, except occasionally in scrofulous subjects, when it is determined by the peculiarity of the case.

In the removal of diseased inguinal glands, it may be stated that the incision should be free, and when practicable made in a line of the axis of the limb, thus obtaining better drainage, less disturbance to the wound from movement, less injury to the arteries or their small branches, and finally, better cicatrix. After exposure of the glands, their enucleation will be more judiciously accomplished with the fingers or knife-handle, rather than with the blade; in fact after the first incision, what very little cutting is necessary is best done with scissors.

A procedure of this kind among tissues already the seat of inflammatory changes, need not be conducted with the idea of obtaining other healing than by granulation from the bottom. By thorough cleansing however, the free use of antiseptics and antiseptic dressings, the subsequent course is materially influenced. Undue inflammation and irritation is prevented, suppuration very much limited, healing expedited, and systemic infection diminished if not prevented, a rise of temperature being rare. To be more particular at the risk of being elementary, I would say that, after thoroughly cleansing the wound, a very good way is to make an application of chloride of zinc, ten to twenty grains to ounce, dust iodoform, more particularly in pockets or recesses, pack the cavity lightly with a fold of antiseptic gauze, leaving the end between the lips of the wound, and over all a dressing of sublimated wood-wool, conveniently held in a bag of antiseptic cheese-cloth; and lastly, a firm spica.

The use of wood-wool in general surgery needs no mention here, but no dressing appears better adapted to the purpose and condition in question. Under its use, the wound need be disturbed but little, change of dressing being necessary but once in three or four days, granulations thrive, drainage by absorption is complete, and the parts are kept in a pure and healthy state.

The dangers now and then alluded to, and cited in objection to this treatment, appear more imaginary than real.

Hemorrhage from the superficial circumflex illi, external epigastric or external pudic, when cut, is readily controlled by torsion or ligature, oozing from overvascular tissue, checked by hot water or pressure of the dressing. Secondary bleeding is not more liable here than elsewhere, has never occurred in my cases, would not be serious, and could be easily controlled.

Important adjacent structures are protected by the deep fascia, and particularly by the operator's anatomical knowledge and care, without which any operation may be dangerous; in fact, any injury to them would seem inexcusable. Pus could not enter the peritoneal cavity via the external abdominal ring and inguinal canal, possibility of which has also been suggested, unless the patient had a hernia, as no canal exists save as an abnormal condition, and besides, no necessity exists for exposing such aperture.

Gangrene of the scrotum following the operation in three cases, as reported by Drs. Winslow and Jones, (*Annals of Surgery*, January, 1886,) is I should say, an almost unprecedented or unobserved occurrence, though so formidable as to be borne in mind and its cause carefully studied.

In the absence of any other explanation, its most likely cause appears trophic, the result of injury to the ilio-inguinal nerve, rather than to infiltration from gravity, extension of inflammation or interference with the blood supply. As a contribution to the study of the subject, and the possibility of its following operative treatment for inguinal hernia, the possibility of which has been suggested, though no cases appear to be reported, it seems appropriate to place on record here the occurrence of this unlooked for complication after an operation for the radical cure of an irreducible hernia which happened in my practice a few years ago.

The patient, a man forty-five years of age in perfect health, apparently, had suffered for many years from an irreducible inguinal hernia, mainly omental in character. Its large size and steady increase interfered very much with his business, causing considerable mental anxiety and also abdominal disturbance, in consequence of which he was referred to me for treatment.

The operation presented no unusual features, and was conducted with strict antisepsis. It consisted in exposing the parts, ligating and removing the altered omentum and thickened sac, and closing the external ring by sutures, which included the pedicle. Thirty-six hours later, œdema and swelling of the scrotum set in, followed by gangrene and death.

Examination afterwards showed the gangrene to be independent of the wound, which was sweet, healthy, and almost entirely closed by primary union.

The explanation of this unhappy accident was extremely difficult at the time, and could only be accounted for under the supposition of injury to the ilio-inguinal nerve, or a condition of the kidney, not revealed by examination of the urine, or, as a remote possibility, both.

A complete autopsy not being allowed, these organs could not be examined, though there was no reason for believing them other than normal.

In conclusion it remains to be stated that the advantages of this method of treating chronic bubo, as found by the writer in an experience of over one hundred cases, is that it is radical and thorough, the duration of treatment shortened and recurrence precluded.

*A CURIOUS EFFECT OF COCAINE.**

By FRANK HAMILTON POTTER, M. D.,

Lecturer on Laryngology, Medical Department, Niagara University.

The following case exhibits an effect of cocaine that is new to me, and, I believe, worthy of record:

M. R., aged twenty-four, female, married, presented herself suffering from follicular disease of the naso-pharynx, complicated by hypertrophies of the anterior ends of the turbinated bodies. The general health was good. Occasionally, there were slight disturbances of digestion, traceable to the disease just mentioned. The hypertrophies were removed with chromic acid, and the naso-pharyngeal disease treated with the glycerite of carbolized

* Reported to the Physicians' Club, September 23, 1887.

iodo-tannin, made according to Sajous' formula. This was changed at times for the stimulant astringents, ferric-alum being preferred. The patient was under observation for three months continuously, and, since, she has appeared now and then, as she deemed necessary. She is practically well; though, upon exposure to wet and cold, she is apt to observe some secretion from the naso-pharynx; and fearing a return of the disease, comes for treatment. Owing to these acute conditions, I have been able to prolong my observations, and to note well the following curious effect of cocaine: This drug was used in the strength of two and four per cent. at first, to overcome her fear of the instruments, and then in the various stages of the treatment, especially when using the chromic acid. Almost immediately upon each application—always within one or two minutes—she experienced a strong desire to have a movement of the bowels. Sometimes, she could not resist this desire; at other times, she was able to do so. After I became familiar with this result, I took great care to eliminate any source of error that might have entered into the observations. The desire always appeared upon the use of the drug, and varied in intensity with the amount used and the strength of the solutions. It would be slight and easily controlled, or strong and utterly beyond her control, according to the freedom with which the cocaine was applied. Other remedies, alone or in combination, applied in the same way with the same instruments, and with the intent to deceive, failed to produce the desire. When cocaine, however, was incorporated with these solutions, the phenomenon appeared just as if cocaine alone had been used.

In seeking for an explanation of this curious fact, we observe, first, that it is a nervous effect; the small quantity of the drug required, and the shortness of the interval from its application, preclude any other conclusion. The nerves supplying the nasal passages, aside from the nerve of special sense, are derived from the fifth nerve and the sphenopalatine ganglion of the sympathetic. We know that cocaine is a powerful stimulant to the vaso-motor nerves, and that it has an inhibitory action on the

nerves of sensation. It cannot act, then, through the fifth nerve, as it destroys its power of carrying impressions. Therefore, we must conclude that it acts through the sympathetic system—that in this case, besides its stimulant action, it produces a distinct and peculiar impression, which is reflected to the nerve centers in the abdomen, and expends itself in the manner above described. Of course, it is useless to speculate as to what the peculiar impression may be. Until we can tell what nerve force itself is, we must despair of analyzing a special impression produced upon a special set of nerves, and acting in a special way. However, it would be interesting to know whether this action of cocaine is more universal than is supposed, and I trust any observations that may be made upon this subject will be reported.

No. 42 West Tupper street.

A CONTRIBUTION TO THE STUDY OF COLLES FRACTURE.

By D. M. TOTMAN, M. D., Syracuse, N. Y.

On the morning of November 3, 1887, J. W., aged fifty-five, a strong, muscular man, was at work upon a flat roof. Being near the edge, and possibly forgetting his position, he rose, and stepping backwards, fell a distance of thirty feet to the ground.

He was admitted to St. Joseph's Hospital, and, among other injuries, had a well-marked colles fracture of the left wrist. On account of profound collapse, only a slight attempt at reduction was made. The patient died on the following morning. Examination of the arm was made twenty-eight hours after death. By a careful dissection over the posterior aspect of the ulna, it was found that the tendon of the extensor carpi ulnaris was displaced. The styloid process of the ulna was fractured, and the portion broken off was left attached to the annular ligament of the wrist-joint.

Only a small amount of manipulation was used, but sufficient to show that extension alone would not replace the dislocated tendon. There was a transverse, non-impacted fracture of the lower extremity of the radius.

Communications to the Editor.

BUFFALO, N. Y., November 17, 1887.

Editors Medical and Surgical Journal :

It was the expressed wish, at the last meeting of the Medical Library Association, that the report of its committee, which I send you, should be published in the Buffalo Medical Journal prior to the annual meeting, December 2d. Owing to the fact that the journals do not, as a rule, appear on the first day of the month, it is hoped the meeting will be adjourned to Friday, December 9th. The place of meeting will be in the library-room of the Buffalo Medical College, and the hour of meeting, four p. m. The profession are invited to be present. Those only who have paid their dues for the year, can vote at the meeting. The dues are three dollars, and can be paid any time to Dr. Hinckle, acting-treasurer. I suppose, arrangements will be made by which payments can be made at the meeting. In case adjournment is made, some public notice will be given.

Truly yours,

WILLIAM D. GRANGER.

BUFFALO MEDICAL LIBRARY ASSOCIATION.

REPORT OF A COMMITTEE UPON PROPOSALS TO MERGE THE
LIBRARY WITH THE BUFFALO MEDICAL COLLEGE LIBRARY,
OR WITH THE BUFFALO (YOUNG MEN'S) LIBRARY.

At a meeting of the Directors of the Buffalo Medical Library Association, held October 28, 1887, the undersigned were appointed a committee to consider propositions made by parties willing, under certain conditions, to assume the care of our Library. We were also directed to report at the annual meeting, held on the first Friday in December next.

We, therefore, make the following report :

In order to fully understand the present condition of the Library, we would briefly review the story of its history and its

struggles. The Library is now ending its fifth year. It has kept its obligation with the profession, but finds itself without professional support. Every demand worthy of consideration, to make the Library more popular, has been adopted. We still keep upon our tables a fresh supply of the best medical periodicals of this country and Europe; we have made the periodicals available for home use almost as soon as received; we have daily kept the Library open for consultation, and provided for some one to be present to attend to visitors, and we have reduced the annual dues to three dollars a year.

We have the foundation for a good library. We have over five years of subscriptions of periodicals, mostly bound; we have over 150 bound books; we have valuable gifts of pamphlets, files of journals, etc., ready to be bound. As an example, we may mention an almost complete file of the *American Journal of Medical Science*. In a word, the Library is just getting into a position to be useful, and command the respect of the profession, its support and its gifts.

The location of the Library has, from the first, been the most important matter for the directors to decide upon. It was debated at length, in the meeting for organization, by the profession at large, and, undecided by them at that time, has been the subject of their discussion at each annual meeting. The directors have tried to secure a central location, to have the rooms open daily, and some one present to attend to visitors. In these efforts, they have been successful.

At first, the Library was in a private house, but the rent—\$200 a year—made it necessary to remove to some less-expensive place. After much deliberation, it was unanimously decided, in 1885, to accept the offer of the Buffalo Medical College, and the Library was removed there, where it still remains. We pay them fifty-two dollars a year. In return, they keep the library-room open six hours a day, and have some one present to attend to visitors. They also attend to all details for the protection of our property. The other expenses of the Library, including about eighty dollars for journals, and something for incidentals, make the expenditures nearly \$150 dollars a year.

This small sum cannot be raised by the profession, and the end of each year finds us in debt. Again and again, the friends of the Library have paid its debts. But the utter want of interest by the profession gives them little encouragement to continue this practice. It is strange that, as the Library becomes more valuable, its support becomes less and less.

The following show the amounts of annual dues received from the organization of the Library:

1883	\$ 305
1884	255
1885	145
1886	113
1887	74
Total	\$ 892
Individual subscriptions	170
Total	\$1,062

Would that the profession still had the desire to support the Library with \$300 a year, and continue to do so for five years! Then, with its diminished expenses, it would grow rich in all that is desirable for a library to be, and, instead of a shame, be a source of pride to our profession, and become too valuable to be neglected.

The Library, however, ends the year with a greatly-diminished income, a debt of over \$100, and the yearly subscriptions of our journals expiring.

It seems impossible to continue our present modest expenses, and your committee feel obliged to advise you to accept one of the two offers made us by those willing to care for our Library, to give it, without cost, shelf-room.

The first offer to consider is that of the Buffalo Medical College. They offer to take in trust our Library, subject to our recall at any time. They agree to keep up our files of journals; the additions they pay for, to belong to the College. They will make the Library a free consulting Library for the whole pro-

fession; the right to a circulating use of the Library to be obtained by paying a fee of not more than three dollars a year.

We would suggest, if the above propositions be agreed to, that a full list of property turned over be made, signed by representatives of Library and College; the College to be responsible for the safe-keeping of our property without any expense on our part; that they yearly make a report to the Library Association, at its annual meeting, of the condition of our property; that we reserve the right to keep up any of our files, and that all books, pamphlets and periodicals added by us shall belong to our Library Association, and be cared for without cost, and returned to us on demand; that a committee of three, representing the Library, shall have access, at any reasonable time, to inspect the condition of our Library, and that a committee of three be appointed to arrange for, and make the necessary transfer.

The Buffalo Library Association is willing to receive our books, bound pamphlets and periodicals, and such other material as can be placed on shelves, and keep them apart from the general library as a distinct collection. Our periodicals, which they wish us to continue, will be placed in their general reading-room. Members of their association are to have, under certain restrictions, the use of our property, and members of the Medical Library Association are also to enjoy the right of use of our Library, though not members of the Buffalo Library Association.

We would suggest, if these propositions are accepted, to insist upon the same safeguards for the protection of our property as we suggested in the case of the Medical College.

The committee do not advise which of the above propositions should be accepted. But we do advise that it is necessary to accept one of them, if the property we now own is to be cared for, and our Association saved from ruin.

WILLIAM D. GRANGER.

JOHN HAUENSTEIN.

F. W. BARTLETT.

Society Reports.

BRITISH GYNECOLOGICAL SOCIETY.

Meeting of October 12, 1887.

Dr. G. Granville Bantock, President, in the Chair.

A dermoid cyst of the ovary was presented by Dr. Robert Barnes. He had removed it a month previously from a lady about thirty years of age. She had suffered intense pain in the pelvis for several years, disabling her from active life, and exhausting her strength. There was a tumor in Douglass pouch, the size of a small orange, movable and firm. The uterus was of normal size. Its position and differentiation from the tumor was determined by the sound. Before submitting to operation, the patient, under other advice, went through a course of massage, which, of course, did no good. Dr. Barnes had known at least one case in which a fatal issue had occurred from injudicious massage in abdominal disease. This lady made a good recovery.

Mr. Lawson Tait said that small dermoid tumors of the ovary generally gave rise to the most intense pain, a fact for which some reasonable explanation was required. It was extremely difficult to diagnose between them and disease of the tube. Perfect accuracy of diagnosis in pelvic disease was not possible in the most skilled and experienced hands.

Dr. Heywood Smith considered the pain to be due to pressure upon the contiguous nerves. A tumor that rose into the abdomen, usually caused but little pain. The amount of pain had to be considered when giving an opinion as to the advisability of operating.

Dr. J. St. Clair Boyd described a case of pseudo-hydramnios, in which the superabundance of fluid did not, as in ordinary cases of hydramnios, take origin in the membrane, but had its source in a hydrocephalic head, from an aperture in which it flowed. The patient, aged forty-two, had had six children, and thought herself pregnant again, but her enormous size seemed inconsistent with that view. She was suffering from enormous abdominal distension, dyspnoea, and dropsical effusion of the lower extremities. On making a vaginal examination, the os uteri was found dilated to the size of a crown piece (silver dollar), and a bag of membrane protruding from it. On

rupturing this, thirty pints of fluid escaped. The child was subsequently delivered with the short forceps. The placenta was adherent, and had to be removed. The uterus was then injected with a hot solution of hydrarg. perchlor., 1 to 2000. No hemorrhage occurred. On the third day, all trace of dropsical effusion had disappeared from the patient's lower extremities. The child, which was born at the seventh month, had an immense hydrocephalic head. The fluid, apparently, exuded below the occipital eminence, at which part the skin had become wrinkled, owing to its escape.

Dr. Bedford Fenwick said the interest of the case centered in the fact that a distinct fistulous opening existed; otherwise, the child's head might have been punctured with and through the uterine membranes. Then the case would have been much simpler, and exactly on a par with his own experience.

Dr. Aveling had seen cicatrices on the surface of a hydrocephalocele, which proved that these cysts ruptured in utero, and discharged their contents.

Dr. Cordes, of Geneva, gave notes of a case of monstrosity under his care at La Misericorde Maternity. The cranial vault was represented by a fibrous membrane. On the left side, through an opening as large as a crown piece, the cerebral substance protruded, covered only by the arachnoid and the pia mater. Feet and hands were malformed, and many of the fingers and toes rudimentary. The monstrosity, which was attributed to maternal impressions, lived six days.

Dr. Manselt Moullin showed a specimen of hæmato-salpinx which he had removed from a young married woman aged twenty-five. She had one child two years previously. In the recent state, the tumor was about the size of an egg, constricted in the middle, and filled with blood-clot. The chief symptom had been a constant aching pain in the lower part of the back, and around the pelvis, from which the patient had been unable to obtain relief in any position, sitting or lying. The pain was also much increased on defecation. The attached ovary was, apparently, healthy, and the appendages on the opposite side seemingly so, and were allowed to remain. Numerous adhesions were broken down, but no drainage tube had been required. The patient had made a good convalescence, and was now free from pain.

Dr. Bedford Fenwick said that the menorrhagia was usually a symptom in all inflammatory diseases of the fallopian tubes. It was of great importance to remove the cyst without rupturing it, a matter of some difficulty in the present instance, and he thought the operator was to be congratulated on the successful result of a very unpromising case.

Mr. Lawson Tait was amazed at a recent paper by Mr. Barton, of Liverpool, in which he asserted that such cases as that belonging to the preparation exhibited by Dr. Manselt Moullin ought, under no circumstances, to be touched. Why should a woman, with the symptoms just described, be obliged to go on living the life of an invalid, with a perfectly useless organ inside her—an organ which could never, by any possibility, resume its original functions—any more than a woman, with a cataract in her eye, be prevented from having her sight restored by the removal of a useless lens?

Miscellany.

THE following works will be issued during December by the New York publishers, Leonard & Co., 141 Broadway: "Diseases of Women," a work based upon the practical experience and teachings of the following eminent gynecologists: Drs. Thomas, Munde, Hunter, Lusk, McLane, Skene, Garrigues, Barker, Emmet, etc.; 436 pages; cloth, \$1.50. "Diseases of Infancy and Childhood," with over 400 formulæ and prescriptions by Drs. Jacobi, Hammond, Flint, Loomis, Janeway, Bulkley, Agnew, etc.; 300 pages; cloth, \$1.00. "Diseases of Heart and Lungs," with over 350 formulæ and prescriptions by Drs. Draper, Delafield, Leaming, J. Lewis Smith, Loomis, Clark, Janeway, etc.; 204 pages; cloth, \$1.25.

A lady, consulting an eccentric Boston physician, said: "The trouble is, doctor, that I can neither lay nor set." "Then, madam," was the reply, "I would respectfully suggest the propriety of roosting." To which the editor of the "Med. Classic" adds that he evidently had her "fowl."

DR. LAENDER, the chief physician at the Vienna Hospital, attempted suicide recently by morphine. He was promptly treated by the performance of tracheotomy, and the mechanical inflation of the lungs through the opening (Fell's method), and recovered.

A MRS. PARTINGTONIAN old lady, being asked her opinion of the relative merits of homeopathy and the regular schools, answered, that for *infantry*, homeopathy might be good enough, but for *adultery*, she preferred the good, old-fashioned doctor.

School-teacher to anxious parent: "Your son is bright, intelligent, and getting along well in everything but handwriting." Parent: "That's all right; his writing doesn't matter. I am going to make a doctor of him."

Selections.

INCREASE OF THE INSANE, AND SOME PROBLEMS CONNECTED WITH THEIR PUBLIC CARE.

By WILLIAM D. GRANGER, M. D.,

First Assistant Physician, Buffalo State Asylum for the Insane, Buffalo, N. Y.

There is much talk about the rapid increase of insanity, and but little exact knowledge in the public mind regarding it. It is easy, from the records of this State, to show just what the visible increase is. What is true here, is practically true of the whole country. By visible insane I mean all who are in asylums.

From October 1, 1880, to October 1, 1886, there has been an increase of 4,001 insane persons in the various asylums in this state, or an average of 666 yearly. The increase for 1886 was 831. In 1870, there were 5,673 insane persons in our state, county, city and private asylums; in 1880, there were 9,537, and in 1886, they had increased to 13,538. But a small part of these are supported at private expense; they are mostly a public charge. The same rate of increase would give 16,202 to be cared for in 1890, and 22,862 in 1900.

A little further study will show that the insane are increasing in a more rapid ratio than the population. In 1870, there was one insane person in the various asylums of the state to every 779 of the popula-

tion; in 1880, one in every 532; and in 1886, one in every 406. This last is based upon an estimated population of 5,503,543, in accordance with the known increase from 1870 to 1880. Probably, the population is some greater and the proportion a little too high.

While an increase of 666 insane, scattered over the State of New York, is easily assimilated, yet, continued year after year, it makes an increase difficult to care for, and a demand upon state, county and city.

What a task the state has before it, alone, in caring for this class of its dependent citizens! It must yearly provide for over 600 new, though by no means recent, cases of insanity. It is easy to illustrate what this means. The State Asylum at Utica has a capacity for 600 patients. It reports the value of its buildings and farm to be \$670,822. The yearly increase of the insane is greater than the capacity of the Utica Asylum, and if they are to be cared for, as they are in that institution, it means an annual expenditure of over \$700,000. And, practically, unless the insane are to be improperly cared for, and crowded into the county and city asylums, this increase cannot be met by an expenditure of less than \$500,000 a year. So that by the year 1900, the state, counties and cities will be called upon to expend \$7,000,000 for this object. Will they do it? Probably they will not, but they *must* do a large part of it.

It is not within the province of this paper to discuss the causes for this increase. It is a very complex and not well-understood subject. There are, however, a few causes easily observed, aside from the increase of the population.

1. The large number of foreigners coming into our state, that are either insane, or possess in themselves, or their first generation, all the essential elements to produce the disease.

2. The prolonged life of the chronic insane, due to their improved care in the many asylums of the State.

3. The improper and delayed treatment in too many of the county asylums, or in the homes of the insane, during the acute and curable stage.

4. The increase of asylums, and their nearness to the people, makes them more used.

Of the first cause, there can be no reason to look for its limitation of action without efficient laws and active control by the General

Government. There is a limit to the action of the second cause, and in the older countries, like England, it is thought to have been already reached. Nothing but strong legislative action, and a watchful Supervisory State Commission with ample powers, can control the third cause. While there are many notable exceptions, too many counties, from false ideas of economy, send their acute insane to their county asylums, or refuse to furnish public aid to send them to state institutions. The fourth cause is in active operation, and, by fixed laws, always exerts an influence in increasing the number of the insane supported at public charge.

It is safe to say that the number of our insane will increase until one in less than every 400 of our population will be confined in our state, county, city and private asylums.

It is very much to be regretted, that the reports of our asylums do not furnish that information by which two very important questions can be answered: First, are the number of acute and curable cases of insanity increasing in a ratio greater than the increase of population, and to what extent do they add to the chronic class? And, second, are those types of insanity which, from the beginning, belong to the chronic and incurable class, increasing in a like ratio?

This lesson of the past should be the guide of the state in its future policy. It should be a wise, humane, economical and settled policy. It should make unstinted efforts to stay this increase, and should afford every means to promote the recovery or improve the condition of each individual insane person. It should rigidly require of those public officials of our counties, cities and towns, into whose hands all of the indigent and pauper insane first come, to immediately provide for their being brought under such care and treatment as each case shall need.

It should even be remembered that many of the chronic insane may be so benefitted by treatment as to be able to return to their homes, perhaps to help to support their family or themselves, or at least relieve the public from their support.

AN INTERESTING CASE OF POISONING BY TYROTOXICON.

Dr. V. C. Vaughan made a verbal report to the Michigan State Board of Health, relative to tyrotoxin poisoning in Milan, Mich., which presents some new features. He was called, September 25th, to

see the family, two members of which were dying, and two others were seriously ill, while one other, a daughter twenty years old, who had been away for some months, was not sick. The father had been sick about eight days, and the three others for a shorter time. The attending physician, suspecting that the sickness was due to tyrotoxin, had warned the daughter, when she returned, not to drink milk. She complied, and was not sick. The mother and son died. He found the four patients breathing in a labored manner, the pupils of the eyes were dilated, and throbbing of the abdominal aorta was marked. The son was more or less delirious. All would pass urine involuntarily, but constipation was marked. Unfortunately, there was no thorough examination of the body after the first death; but, upon the second death, a thorough *post mortem* examination was held. Nothing abnormal was found, except that the large intestine was constricted by its circular fibres, which accounted for the constipation; the heart was arrested in systole; the death occurred from failure of the heart. The analysis of the stomach, by Prof. Prescott, revealed no mineral poison. Dr. Vaughan's assistant, Mr. Novi, found enough tyrotoxin in the contents of the stomach and intestines to sicken a cat.

Dr. Vaughan had confirmed the diagnosis of the attending physician, who said it was sickness due to "cheese poison." It was not like arsenic poisoning, and, although it somewhat resembled poisoning by belladonna, yet there were points of dissimilarity enough to throw that out as a possible cause, especially as another poison was actually found in the stomach.

Dr. Vaughan soon made up his mind that the sickness was probably due to the bad and unwholesome condition of the house, which was fifty years old and nearly rotten. One floor was nearly rotted away, and was covered by a newer one. The house had settled a good deal; there was no cellar; the land in all directions sloped towards the house, so that the building was constantly on damp soil, as there was no artificial drainage. The sweepings and moppings for years had accumulated in the cracks of the floor, so that, when the floor was taken up, a nauseating odor arose. The farmer sold cream to a creamery in the neighborhood, the proprietor of which had received the documents of the Michigan State Board of Health on cholera infantum and poisoning by cheese, milk, etc. He induced the farmer to keep his milk away from the house, and in a cool place, until the

cream was collected and taken away. The milk consumed by the four members of the family was kept in a small closet or pantry in the house, where they frequently went and helped themselves to milk. They had been sick in the same way a number of times before this violent outbreak, which resulted in the death of two of their number. Dr. Vaughan made experiments as follows: He placed fresh milk in the pantry for a short time, and then found enough tyrotoxin had developed in the milk to make a cat sick. He took some of the earth under the pantry floor, and placed a small quantity of it in some fresh milk, soon after which tyrotoxin was obtained from the milk, while none could be obtained from another sample of fresh milk which stood by the side of the milk in which the earth had been placed. This seems to demonstrate that the soil contained the germ of decomposition which produces the poison.—*Medical Record*.

THE TREATMENT OF URETHRAL STRICTURE BY ELECTROLYSIS.

Robert Newman, M. D., of New York, gives in the *Med. Register* the following *recapitulation* of rules as a safe guide for practitioners who wish to adopt the treatment of electrolysis in strictures of the urethra:

1. Any good galvanic battery will do which has small elements and is steady; the twenty-cell battery, carbon and zinc, is an excellent instrument, sufficient, particularly, for the beginner.
2. The fluid for the battery ought not to be used too strong.
3. Auxiliary instruments, as galvanometer, etc., are important to the expert, but not necessary for the beginner.
4. For the positive pole, a carbon electrode is used, covered with sponge, moistened with hot water, and held firmly against the cutaneous surface of the patient's hand, thigh or abdomen.
5. For the absorption of the stricture, the *negative* pole must be used.
6. Electrode bougies are firm sounds insulated with a hard-baked mass of rubber. The extremity is a mental bulb, egg-shaped, which is the acting part in contact with the stricture.
7. The curve of the bougie is short; large curves are mistakes.
8. The plates must be immersed in the fluid before the electrodes are placed on the patient, and raised again after the electrodes have been removed.

9. All operations must begin and end at zero, increasing and decreasing the current slowly and gradually by one cell at a time, avoiding any shock to the patient.

10. Before operating, the susceptibility of the patient to the electric current should be ascertained.

11. The problem is to absorb the stricture, not to cauterize, burn or destroy tissues.

12. *Weak currents at long intervals.*

13. In most cases, a current of six cells, or from two and a-half to five milliamperes, will do the work ; but it must be regulated according to the work to be done.

14. The *seances* should be at intervals, not too frequent in succession.

15. The best position for the patient to assume during the operation is that which is most comfortable for himself and operator. I prefer the erect posture, but the recumbent or others may be used.

16. Anesthetics I like to avoid ; I want the patient conscious, so that he can tell how he feels.

17. Force should never be used ; the bougie must be guided in the most gentle way ; the electricity alone must be allowed to do the work.

18. During one *seance*, two electrodes in succession should never be used.

19. All strictures are amenable to the treatment by electrolysis.

20. Pain should never be inflicted by the use of electrolysis ; therefore, it should not be applied when the urethra is in an acute or even sub-acute inflammatory condition.

TAPE-WORM IN DENMARK.

In 1880 I reported 200 cases of cestodes occurring in man, and since that date I have observed a new series of 100 cases.

Of these 300 cases more than half were treated in Copenhagen, and of the last 100, eighty-one were observed in this city.

According to the sex of the patients the different varieties of tape-worm were distributed as follows :

Sex.	<i>T. saginata.</i>	<i>T. solium.</i>	<i>T. cucumerina.</i>	<i>Both. latus.</i>
Males	59	17	6	3
Females	124	57	2	22

According to the age of the patient the varieties of the worm were distributed as follows :

Age.	T. saginata.	T. solium.	T. cucumerina.	Both. latus.
Under 1 year . .	.	.	9	.
1 to 10 years . .	11	7	.	.
10 to 20 years . .	14	5	.	.
20 to 30 years . .	79	15	.	10
30 to 40 years . .	35	15	.	6
40 to 50 years . .	20	4	.	5
50 to 60 years . .	15	2	.	.
60 to 70 years . .	4	.	.	2

Tænia solium has been diminishing in frequency, especially since 1880, while *tænia saginata* has perhaps increased.

	T. saginata.	T. solium.	T. cucumerina.	Both. latus.
Case before 1869 . .	37	53	1	9
From 1860 to 1880 .	67	19	4	11
From 1880 to 1887 .	86	5	4	5

With regard to the number of worms in a single patient the cases were distributed as follows :

- T. saginata* . . 190 cases; always single.
- T. solium* . . . 77 cases; 13 cases with more than one worm.
- T. cucumerina*. 9 cases; 3 cases with two worms.
- Both. latus* . . 25 cases; 5 cases with from 2 to 14 worms.

The remedy employed most frequently was oleo-resin of male fern, *Æiiss.*, followed by a laxative of calomel and jalap, *aa gr. viii.*—*H. Krabbe in Nordiskt Medicinskt Arkiv.*

INDICATIONS FOR THE USE OF NITRO-GLYCERINE.

The value of nitro-glycerine in various diseases, as angina pectoris, hemicrania, and neuralgia, and also in sea-sickness, certain forms of anæmia, etc., depends on the existence in these of an irregular distribution of the blood. This abnormal condition may be recognized by a certain grade of pallor of the skin, especially of the face, an appearance co-existent with a weak pulse and small radial arteries, hard and frequently situated at a certain depth. When, on the contrary, the headache and neuralgia occur in persons with chronic congestion of

the subcutaneous vessels of the face, nitro-glycerine is contra-indicated ; and similarly it should not be used in asthma when the face is congested from the effects of the emphysema. Thus it may be said that the best therapeutic results from nitro-glycerine may be obtained in those cases in which angina pectoris, neuralgia, etc., are associated with pallor of the countenance.

The condition of the pulse is the best indication for the use of nitro-glycerine, and the safest guide for the determination of the time in which one should begin the cure. The smaller the radial artery is, so much the more rapidly does it dilate under the influence of the drug, and so much the less are the secondary effects produced by it ; on the contrary, the fuller the pulse, and the more tense the radial artery ; so much the less this resents the influence of it.

When the pulse is small, the usual dose of one drop of a one per cent. solution is sufficient, while if the pulse is large, two drops may be required to obtain the full effect. When the radial is soft and the pulse weak, smaller doses should be given—one-half to one-fourth of a drop. The sensations experienced by the patient, throbbing and pain in the head, as well as the distension of the radial artery under the observer's finger, should be the guide for the increase of the dose.—*Giornale Internazionale delle Scienze Mediche.*

THE UTERUS AND MORPHINOMANIA.

Dr. Lutaud recently presented to *La Soci  t   de M  decine* a valuable paper on this subject, of which the following is the summary :

“I would especially recommend the use of morphine to combat the hemorrhage of uterine cancer. In treating these cases, I have observed the relation of this therapeutic agent to the healthy and diseased womb. In the former case it is injurious, causing the menstrual functions to disappear, but in the latter it is useful, diminishing uterine activity, and reducing the hemorrhage and pain which accompany cancer and fibroma uteri. These facts may be considered as established :

“1. Chronic morphinism diminishes or suppresses menstruation.

“2. From this fact we are justified in giving morphine in uterine diseases which are aggravated by the menstrual flow, and which are not susceptible to curative treatment.

"In cancer of the uterus, I would recommend the production of the morphine habit, giving the drug subcutaneously, beginning with a quarter of a grain, and increasing the dose until from two to eight grains are taken during the day. In this manner the pain and hemorrhage are reduced to a minimum, a necessary stimulant is furnished and life is prolonged."—*Revue de Therapeutique*.

VERY SUGGESTIVE AND PROMISING.

The alumni of the Jefferson Medical College have at last taken a decided step to show their dissatisfaction with the want of desire on the part of the management to adopt a higher grade of instruction in that school. A few days ago, the executive committee of the Alumni Association sent the following recommendations to the faculty :

WHEREAS, It having come to the knowledge of this executive committee of the Alumni Association, that four students have gone to the University of Pennsylvania to pursue their medical education at the recommendation of the Alumni of this College, on the ground that Jefferson Medical College did not provide a three-years' graded course, and did not furnish clinics or instruction on the special branches of medicine and surgery—

Be it Resolved, That the executive committee, having the best interest of our Alma Mater at heart, respectfully announce these facts to the faculty, that they may take such action as they deem best to overcome this apparent growing dissatisfaction of our alumni.

Surely, the suggestiveness of such a step, on the part of a college's own alumni, must be apparent, and speaks well for the future of our medical schools and their graduates. The call for more work from the student is becoming louder every year, and the end cannot now be far away.

THE TREATMENT OF ACNE.

Brocq recommends as essential in the treatment of this disease, the free use of hot water, alone or with camphor (alcoholic solution) or cologne. In addition, he gives the following formulæ, which he has found of service in his own practice :

℞ Hydrarg. bichlorid. gr. xv.
 Alcohol ℥iss-iii.
 Aquæ rosæ ℥ivss. or iii.

This solution may be diluted, as required, by hot water. The following is an ointment used by Hebra:

℞	Sulphur. precipitat.	
	Potass. bicarb.	
	Glycerin	
	Aquæ lauro-cerasi	
	Spts. vin.	aa ℥ii.

This is applied during the night. On the morning following, it is removed by washing in warm water, and during the day a protective paste, like the following, is used:

℞	Zinc. oxid. pulver.	gr. xxx.
	Vaselin. pur.	℥vi¼.

At the hospital at St. Louis, this sulphur paste is a favorite application:

℞	Sulphur. precipitat.	℥iii¾-℥viiss
	Alcohol. camphorat.	℥viiss.
	Aquæ ros.	℥iii¾.
	Aquæ destill.	℥iv¾.

This is also used at night, and an oxide of zinc ointment is used during the day.—*Revue Generale de Clinique et de Therapeutique.*

ONE CAUSE OF CHOREA.

Dr. Wm. Osler, during the summer session of the Infirmary for Nervous Diseases, Philadelphia, delivered two lectures on the general etiology and symptoms of chorea. After enumerating a number of probable causes of this affection, he says, "that a really important factor is the strain of education, particularly in young girls during the third hemi-decade. Although, in only thirty cases, "over-work at school," "examinations," "worry about lessons," are given as exciting causes, I feel sure that, in a much larger proportion, the stimulation of school life is responsible for conditions which favor, if they do not actually precipitate, attacks. Keen, active-minded little girls, from ten to fourteen years of age, anxious to do well at lessons, stimulated in their efforts by parents and teachers, form a large contingent of cases. In London, Sturges has for some time studied this question with great care, and his papers on school-made chorea call attention to a serious danger in the forcing system, which prevails so largely in our modern methods of education."

A NEW THEORY IN REGARD TO THE FUNCTIONS OF THE DUODENUM.—Treves has observed that the third portion of the duodenum is firmly attached to the four lumbar vertebræ by a ligament called the musculus suspensorius duodenalis. This fact is observed pretty constantly in animals and in man, also that the duodenum forms a curve something like a siphon trap. The fixed portion always being stationary, allows the free portion to assume varying degrees of curvature. The duodenum being always more or less filled with fluid from liver and pancreas, that this curving of the duodenum performs the function of a siphon trap, and absorbs all the fetid gases that form in the bowels, that might have a tendency to regurgitate upwards.—*Weekly Medical Review*.

THE HOUR OF CONFINEMENT.—A writer in *Le Journal de Medicine de Paris* has investigated this subject in *La Maternite Ste. Anne*; and finds that in each 1,000 cases, 450 occur between eight A. M. and eight P. M., and 550 between eight P. M. and eight A. M., the ratio being 100 to 122.

Dividing the day into quarters, cases occur as follows:

From 6 A. M. to noon.	From noon to 6 P. M.	From 6 P. M. to midnight.	From midnight to 6 A. M.
239	220	272	269
23.9 per cent.	22. per cent.	27.2 per cent.	26.9 per cent.

Editorial.

BUFFALO COLLEGES.

The regular announcements of the opening of our Colleges has been crowded out of former numbers. The Buffalo University opened September 20th with appropriate exercises. The address of the evening was made by Dr. Henry R. Hopkins, which was well received by the large class and their friends who were present. The College has a fine class in attendance, numbering about 120 in the Medical Department, and thirty-five in the

School of Pharmacy. The new Professor of Theory and Practice, Prof. Chas. G. Stockton, fully meets, it is said, the most sanguine expectations of his many friends, who congratulated the College on this commendable appointment. The recovery of Prof. Mann is a source of congratulation to the College as well as the general profession. Dr. John H. Pryor, of this city, has been appointed Adjunct-Professor of *Materia Medica*, Therapeutics and Hygiene, and, it is generally understood, will give most of the lectures on this branch. Dr. Van Den Bergh, who has been an associate of Prof. Withaus for the past year, will give most of the lectures and instruction in Chemistry, Dr. Withaus now being in New York permanently. The College of Pharmacy faculty remains the same, and the course is under the direction of Dr. Van Den Bergh, Dr. Gregory, and Prof. Kellcott, of the Normal School. Prof. Oldberg, of Chicago, will be in attendance two weeks of the course, and give the usual number of lectures during that time.

Niagara University was opened one day later, and has a large class of well-educated young men in attendance, numbering, in all, about fifty in the Medical Department, and about twenty in the Law School. The opening address of the Medical School was given by Prof. A. A. Hubbell, of the faculty, who took for his subject the aims of the medical student. He commented at length on the following:

1st.—Motives which actuated them in entering upon the study of medicine, and those which are to be commended.

2d.—The duties and objects of the physician's vocation, and the factors that will contribute to his success; primarily, a thorough medical training, involving faithful and prolonged study, as well as a careful preliminary preparation for the study.

3d.—Some of the achievements of American medicine in the past, and the outlook and prospects for its future, and the encouragement which should stimulate the student of to-day to study and work, and make a history and name for himself as worthy and renowned as any in the past.

The address was instructive, and listened to with marked interest throughout.

The course is progressing satisfactorily. The Maternity Hospital, which is conducted by Dr. Lothrop, affords each member of the graduating class an opportunity to attend two or three accouchements, under the direction of Dr. Frederick, the assistant in Obstetrics, thereby affording facilities in this branch enjoyed by few colleges in this country. The Dispensary, the Emergency Hospital, and the Hospital of the Sisters of Charity afford ample clinical material. The clinical lectures of Prof. Cronyn, in the wards of the hospital, receive many expressions of praise from the students.

By the promotion of Dr. Campbell to the chair of *Materia Medica and Therapeutics*, it has already been demonstrated, the faculty and trustees made a wise choice. The Doctor delights, as well as instructs, his students, and, without a dissenting voice, he is accorded the highest rank as a lecturer and teacher. The chair of *Hygiene* has been filled by a most estimable man, and this branch, which is assuming such great proportions in the medical science, will, doubtless, be well taught by Dr. A. E. Persons, who has been appointed lecturer on this subject. The Doctor has had a classical education and a thorough medical training; was graduated from the New York College of Physicians and Surgeons. He has practiced about six years, four of them being in this city.

The Law School is well attended, there being, as stated, twenty students. This far excels the expectations of its founders, and augurs well for the future of the College. The opening exercises were held October 3d, the address being given by Hon. Chas. Daniels, LL.D., Dean of the faculty. The lecturers in all departments are well chosen, as the experience of the past two months demonstrates.

VAGINAL HYSTERECTOMY FOR CANCER.

The cancerous uterus has always been considered by the laity the opprobrium of the healing art, and it is difficult to say that, judged by the results of all treatment heretofore offered by

both medicine and surgery, singly or combined, it has not deserved this traditional relegation to the realm of non-curable maladies. In the light of present achievements, thanks to Freund, Billroth, Czerny, Schröder and others, this verdict is likely to undergo a modification, if not a reversal.

In the ten years that have elapsed since Freund inaugurated the extirpation of the cancerous uterus, sufficient data would seem to have accumulated to enable the formation of an intelligent judgment as to its value as a means of relief from the ravages of this hopeless disease. Freund's operation combined the abdominal and vaginal methods, but in Germany the total extirpation of the organ, *per vaginam*, has now superseded the combination plan. Martin and Fritsch both prefer it to even the high excision, which was formerly practiced in epithelioma of the cervix.

The published reports, up to the present time, include a total of 722 operations with 170 deaths and 552 recoveries, the mortality being twenty-four per cent. As to relapses, these statistics are, as a matter of course, not available for the whole number. But Martin has tabulated forty-four of his recoveries up to the end of 1885, with only thirteen relapses; or, of the forty-four cases, twenty-nine and seven-tenths per cent. relapses, and seventy and three-tenths per cent. recoveries. This embraced his work for six years, as it bears upon the question of relapses. It is doubtful if any other method can show equally good results. They are certainly convincing enough to establish the operation on a basis of legitimacy, and to claim for it "full and equal rank among all the methods for the treatment of cancer of this organ."

With vaginal hysterectomy for cancer once established amongst legitimate surgical procedures, comes the question of its limitations and boundaries, and of its adaptability to special and particular cases. These are mainly to be settled through much time and experience, but one boundary line appears to be already pretty definitely fixed, viz., that it is nearly useless to make the operation when the disease has extended beyond the confines of the uterus itself. When there is carcinomatous infil-

tration in the vicinity of the uterus, which can be detected beforehand, then there can be little doubt as to what the decision should be; but the progress of the disease along the lymphatics is so subtle, that it is often impossible to discover it until the vaginal roof is opened. In such cases, the operations may, with propriety, be completed, since they are not more than ordinarily dangerous, as far as the immediate recovery is concerned, though probably hopeless as to permanent cure. However, they ought, says Martin, to be put in a separate column in summing up the permanent results of the operation.

The technique of vaginal hysterectomy, if Martin and Fritsch are followed, is, it must be confessed, somewhat difficult, but the operation need not be condemned or neglected on that account. To be sure, it requires some experience to do the operation well, and statistics improve with increased familiarity with the work. The open-wound treatment of Billroth is gaining some favor on account of its greater simplicity, Brennecke having already reported twenty-one cases treated by that method, without a death. The time consumed in the operation can be shortened by this method, which is considered important by many. Whichever way is chosen, the cicatrix in the vaginal roof becomes smooth.

If these patients do not become septic, and the operation is not otherwise complicated, Martin says they make extraordinarily easy recoveries; and, further, that they do not lose their sexual feelings or feminine form even after removal of uterus, tubes and ovaries.

Though, at present, we have to look to Germany chiefly for the literature of this subject, it is yet gratifying to note that much progress is making in America. Dr. A. P. Dudley has collected (*New York Medical Journal*, July 16, 1887,) a total of sixty-six operations done in this country by thirty-three operators, with a mortality of twenty-two. The best results, as might be expected, are obtained by the operators of the largest experience: Dr. Lane, of San Francisco, having done nine vaginal hysterectomies, with three deaths; and Dr. Bernays, of St. Louis,

six, without a death. Dr. P. F. Mundé, whose paper before the American Gynecological Society, in 1884, was the first important American contribution to the literature of the subject, has also done the operation six times, with two deaths, and Dr. Polk, likewise, six times, with two deaths.

As the sum of the whole subject, viewed from its various standpoints, it may be briefly and fairly stated that, whatever the future may bring forth, the operation of the present for cancer of the uterus, whether it be carcinoma of the body or neck, or epithelioma of the cervix, is total vaginal extirpation of the organ.

DR. LUCIEN HOWE.

The many patients and friends of Dr. Howe will learn with regret that he has arranged for a prolonged absence from the city.

The object which he has in view is, however, one so praiseworthy, and the sacrifices involved in its fulfillment so great, that the profession will join with us in the hope that his researches will result in the advancement of medical knowledge, and renewed honors to himself.

The last census shows that, during the decade ending in 1880, blindness has increased four times as fast as the population. At the last meetings of the New York Medical Society and the American Ophthalmological Society, the subject was discussed, and it was shown that eye diseases in this country are largely due to contagion.

Both of these societies appointed committees to investigate and discover the best remedy for this growing evil, and Dr. Howe was honored by being made chairman of both committees.

It is for the furtherance of these investigations that Dr. Howe has determined on relinquishing, for a time, his lucrative practice, and exiling himself to Egypt and other eastern countries, where contagious eye diseases are peculiarly prevalent, there to pursue

the study of these affections in the light of more recent bacteriological knowledge.

As he has been officially accredited by the U. S. Government, he will receive every possible assistance in his studies from our representatives abroad, and, knowing the energy, ability for work, and scientific attainments of our quondam editorial colleague, we feel sure that important results will be obtained.

Dr. Howe proposes to sail from New York December 3d, and it is hoped that he will be able to return early next summer.

THE NEW YORK STATE MEDICAL ASSOCIATION.

This Association held its fourth annual meeting in New York late in September. Owing to the great interest taken in the International Medical Congress, and the amount of space taken



PROF. JOHN CRONYN, M. D.

by its reports in this journal, the notices of the meeting were omitted. The Association was well attended, and many distinguished foreign physicians remained to attend its sessions. The articles and addresses presented were said to excel any offered in the past. The address of the second day was given

by Prof. John Cronyn, of the Medical Department of Niagara University, of this city. The Association closed its labors by the election of Dr. Cronyn as President. This is a most fitting tribute to Dr. Cronyn, who is recognized as one of the foremost physicians of Western New York. His labors in behalf of higher medical education are well known to all our readers. He is a distinguished teacher, an eminent citizen, and occupies a high position in this community, where he has practiced for thirty-odd years.

We are able to present our readers a picture of the Doctor, by the courtesy of the Buffalo *Morning Express*.

AMONG the awards to exhibitors at the American exhibition, London, was a gold medal to Fairchild Bros. & Foster, New York, for "digestive ferments," extractum pancreatis, peptonizing powders, and pepsine in scales. All who have used these elegant, reliable and convenient preparations for peptonizing food, will recognize that this recognition of their merit is well deserved.

THE JOURNAL, as well as our readers, are under obligations to Dr. W. W. Potter for many valuable editorials received from time to time. The Doctor is a clear and concise writer.

Book Reviews.

Anatomy—Descriptive and Surgical. By HENRY GRAY, F. R. S., Lecturer on Anatomy at St. George's Hospital Medical College. Edited by T. Pickering Pick, Surgeon to, and Lecturer on Surgery at St. George's Hospital. A new American, from the eleventh English edition, thoroughly revised and re-edited, with additions by William W. Keen, M. D., Professor of Surgery in the Women's Medical College of Pennsylvania, to which is added "Landmarks—Medical and Surgical." By LUTHER HOLDEN, F. R. C. S., with additions by William W. Keen, M. D. Philadelphia: Lea Brothers & Co. 1887.

"Gray's Anatomy" is the one book which the medical student or practitioner cannot do without, and the appearance of a new

edition is an event of importance. About five years ago, a new edition appeared, which, at that time, seemed to be as nearly perfect as possible; but the present book shows many valuable improvements upon the tenth edition. The American editor thus summarizes the chief changes: "In the section on the brain, I rejected the English cuts showing the sulci and convolutions, and substituted the more accurate and generally-adopted plates of Ecker. The text was correspondingly inaccurate, and could not be adapted to the new illustrations without a few changes, which, it is hoped, will facilitate the study of this difficult part of anatomy. I have also carefully described the cerebral circulation, and have added a section on cerebral localization and topography—subjects of great and increasing importance, especially in view of the recent rapid strides in cerebral surgery. The chief anatomical text-book in the English language ought not, I think, to be behind in this department, but should lend its aid to further progress by giving the fullest and most accurate knowledge attainable. Among the other additions to the text may be noted also paragraphs on the action of the muscles of the foot-sole; a more accurate description of the pectoralis major, supinator longus, and thenar muscles; and a careful description of the palmar fascia. In all, 113 new engravings have been added, of which many are original. These, with their descriptive matter, and likewise all my other additions, have been distinguished by brackets. Among these new illustrations are many of the most obvious utility, such as a series of sections through important joints; a series of frozen sections through the trunk, the extremities, and the female pelvis; cuts illustrating the histology of various tissues; the shoulder and pelvic girdles; the interior of the nose and the larynx; the development and occlusion of the teeth, and the absorption of the alveolar processes; the structure of the muscles; the ligamentum nuchæ; the occipito-frontal and interosseous muscles; the palmar fascia; a series giving the points for the application of electricity to the muscles; a series on the circulation of the brain and spinal cord; another series to illustrate cerebral locali-

zation and topography ; another, on the cutaneous distribution of the nerves ; a number of cuts to elucidate the anatomy of the cerebrum ; two showing the sympathetic nerve ; and others illustrating the peritoneum, the muscularis mucosæ, the female perineum, and the genito-urinary organs of both sexes. Wherever practicable, colors have been introduced to distinguish the veins, arteries and nerves, so that, in the colored edition, the American additions shall be in harmony with this novel feature of the latest English original." There is scarcely a section of the work, therefore, which has not been extensively enriched in the matter of illustrations. Following the English edition, the arteries, nerves and veins in the wood-cuts have been colored. This adds decidedly to the beauty of the illustrations, if not to their value, and the additional expense being but slight, we think the colored edition will be popular with the students. The publishers have issued the book in very handsome form, and indeed, as a whole, it is very near perfection.

Treatise on Human Physiology for the Use of Students and Practitioners of Medicine. By HENRY C. CHAPMAN, M. D., Professor of Institutes of Medicine and Medical Jurisprudence, in the Jefferson Medical College, etc. Philadelphia: Lea Brothers & Co. 1887.

Prof. Chapman's abilities as a teacher have been long recognized, and this book is the outcome of years of study and observation, and long experience in this special branch of medicine. It represents very fully the existing state of physiology, based upon comparative and pathological anatomy, clinical medicine, physics and chemistry, as well as upon experimental research. While we have already many excellent works on the subject, the present one has a special value to the student and practitioner, as devoted less to the discussion of theories and more to the practical application of the well-ascertained truths which the advance of science have given to the profession in

this department, which may be considered the foundation of rational medicine. The work is issued in very handsome form by the Lea's.

Lessons in Gynecology. By WILLIAM GOODELL, A. M., M. D., Professor of Clinical Gynecology in the University of Pennsylvania. Third edition; thoroughly revised and greatly enlarged, with 112 illustrations. Philadelphia: D. G. Brenton, 115 South Seventh street. 1887.

This edition of a most excellent work is in every way better than the preceding ones, and that is saying a great deal, for "Goodell's Gynecology" has deserved the reputation it has enjoyed. It contains the wise instruction of a thoughtful teacher, original and independent in his views, but recognized as an indefatigable worker, and the experience and knowledge gained since the last edition of the book appeared, has been drawn upon, so that every chapter has been revised, and much new matter added. The work is one which we would heartily commend to any of our readers who have not got it.

A Manual of Organic Materia Medica. By JOHN M. MAISCH, Phar. D. Third edition; with 257 illustrations. pp. 532. 12mo. Philadelphia: Lea Brothers & Co.

This is an excellent manual for the use of pharmaceutical students and physicians who care to become acquainted with the sources of our materia medica. All of the drugs of vegetable and animal origin now in use, whether they have found a place in the *United States Pharmacopæia* or not, are discussed, their origin, habitat, description and properties being given.



VOL. XXVII.

JANUARY, 1888.

No. 6

Original Communications.

THE RECOGNITION OF INCIPIENT GENERAL PARESIS.

By OGDEN BACKUS, M. D., of Rochester, N. Y.,
Late Assistant Physician State Lunatic Asylum, Utica, N. Y.

General paresis, or general paralysis of the insane, is a disease which rarely comes under the care and observation of the general practitioner, except in its early stages, and is then often not recognized, or is mistaken for some other form of insanity or disease of the nervous system. During a period of over four years at the State Lunatic Asylum, at Utica, there was a large number of general paretics admitted, and in the majority of cases the disease was unrecognized by the medical men who had made the necessary examinations and certificates. Dr. Gray, in an article read before the State Medical Society some years ago, said, that in the entire number of cases placed in the asylum since his connection with the institution, but few were recognized by the physicians in attendance before admission, and that most of the cases were brought by friends, in the confident expectation of a speedy recovery, based generally on the opinion of the family physician.

•

Dr. McDonald, formerly of the Ward's Island Asylum, states that an examination of the certificates sent by gentlemen in private practice to that asylum, shows that they recognized the true character of the malady in but three cases out of the thirty-five in which they made affidavit. Corroborative evidence of the want of familiarity with the early symptoms of the disease is often met with in the newspapers. They record the illness of some prominent individual, with the detail of such symptoms as point strongly to general paresis, and often conclude with the announcement that, "in the opinion of the family physician, a few weeks' rest will restore the patient to his usual health." The case of the celebrated actor, John McCullough, who died a few years ago in Philadelphia, is an example. For months, he was permitted to wander about the country, indulging in visionary schemes and the excesses peculiar to this disease. The newspapers frequently chronicled his vagaries, but steps were not taken for his comfortable and safe maintenance, until a large part of his fortune had been squandered. More recently, a famous author was admitted to an asylum with general paresis, but not until he had brought financial ruin on himself and family, and was only a wreck of his former self.

That a malady so grave, destroying not only mind, but life itself, so important in its medico-legal aspects, should thus escape the diagnostic acumen of a large number of medical men, is a matter of more than ordinary interest, and yet the symptoms are often so obscure, and masked under such a variety of forms, that physicians even resident in asylums for the insane, are often chary of giving a positive diagnosis until the case has been under observation for a period.

General paresis remained unrecognized until fifty or sixty years ago, and the first published notice of this disease in America, was by Dr. Luther Bell, Superintendent of the McLean Asylum, in his annual report for 1843, where he described a few cases. At present, a considerable proportion of those admitted to every asylum are of this malady. In an analysis of eleven hundred and ninety cases of insanity admitted to the State

Lunatic Asylum, at Utica, I found that ninety-one were patients suffering from this disease, or seven and six-tenths per cent. of all persons admitted. In the Ward's Island Asylum, the percentage is somewhat larger, doubtless due to the fact that it draws the insane from the more densely-populated cities, where the exciting causes of this disease are more prevalent than in the rural districts of Central New York. Dr. McDonald, in an analysis of sixteen hundred cases admitted to the above asylum, classifies two hundred and five as paretics, or about thirteen per cent. of the whole number admitted.

In order to recognize general paresis in its incipency, a familiarity with its ætiology is almost indispensable. First among the predisposing causes is sex; a characteristic observed is its selection of the male in a large proportion; indeed, in the early history of the disease, writers upon this subject were inclined to regard it as appertaining to men only. Sankey gives the average liability of the sexes to general paresis in England, as five men to one woman. McDonald finds that the statistics of the two public asylums of New York city, for three years, compare as follows: Asylum for females, seven paretics admitted in a total of thirteen hundred and thirty-five cases. In the asylum for males, one hundred and sixty-six were general paretics, out of twelve hundred and thirty-eight cases admitted during the same period. In other words, insanity has taken the form of general paresis in but one-half of one per cent. in the females, while it is found in twelve and six-tenths per cent. of the males admitted to these institutions. By these figures, we also see that twenty-four men to one woman was the ratio, a statement which does not concur with my own observation. At the Utica Asylum, in 1883, there were thirty male and four female paretics admitted; in 1884, there were twenty-seven male and five female paretics admitted; while in 1885, there were admitted twenty men and five women suffering with this disease. These figures show that in Central New York, at least, the proportion is six males to one female.

Age is another predisposing cause, for general paresis is usually a disease of middle life. From Dr. Mickle's calculations, based on the thirty-second report of the Commissioners in Lunacy, I learn that the relative age of patients is forty-four per cent. between forty and fifty years, and thirteen per cent. between thirty and forty years. In the Ward's Island Asylum, of a hundred and forty cases admitted during a given period, sixty-six were between the ages of thirty-five and forty-five; thirty were between twenty-five and thirty-five; and forty were between forty-five and fifty-five; only four were under twenty-five, the youngest being twenty-three. The youngest case I have met with was twenty-seven years of age, and I believe the disease to be rare under thirty years.

The age from thirty-five to fifty years is the period in which general paresis is most commonly developed, for, as Mickle most beautifully describes, "this is especially the age of ambition, pride, selfishness, of speculation, of daring attempts on the heights of fame, of wealth, power, prestige and social position—the age of excessive and protracted intellectual labor—of anxious and strenuous efforts to provide for and ensure future success to a growing and exigent family—the age in which excessive physical labor is often undertaken, which, like intellectual labor, may be often sustained by too liberal potations, and which is no longer counteracted by the elastic power of accommodation of youth, or by its restfulness after fatigue. Then, too, it is the age most liable to chagrins, and mortifications of spirit, to losses, to disappointments—the age occasionally of sudden beggary after a life of toil and hard-earned success—the age at which so often the mirage of hope vanishes and its aerial castles dissolve; at which the projects of life fail, and crumble away, and its fire dies out. Then, also, it is too often that the spirit of the man wanders forlorn amidst the desolate groves of his affection, the desecrated temples of his noblest aspirations. No wonder that causes such as these acting upon those whose nervous systems have lost the elasticity of youth, whose blood and blood-vessels are further impaired by the effects of alcohol,

whose naturally hyperæsthetic brains have been exhausted by irritable reaction, to every strong impression—no wonder, I say, that in them, causes such as these should bring about a sudden or protracted hyperæmia—a slow, irritative form of degeneration, or even inflammation in the supreme centres of the organ of the mind.”

Heredity may be an important factor, but, as Verga states, the hereditary affinities of general paresis are not with ordinary insanity, but with paralysis, apoplexy, cerebral-congestion and other brain diseases. Nevertheless, in a certain proportion of cases, I have found insanity to exist in one or the other of the family branches.

The causation of general paresis is a subject on which a variety of opinions are held. “The things that most excite and, at the same time, most exhaust the highest brain energy, are those that tend most strongly to cause this disease.” Town, rather than rural life; a sanguine temperament; constant worry and irritation or intense intellectual work. Intemperance appears in every statistical table as a predominating cause of general paresis, and is often associated with exhaustive, heavy, physical labor or sexual excess. There is, however, a great difference of opinion in regard to sexual excess as a prime cause of general paresis. Dr. Maudsley lays great stress on it, and chiefly that which is carried on systematically by faithful married persons; but Dr. Mickle, on the contrary, says: “Having for years sought, and usually in vain, for a history of sexual excesses in my own cases, I do not hold with the view that excessive frequency of sexual intercourse is, by far, the most fertile cause of general paralysis. No doubt, in some cases, and particularly among the newly-married, this may be the cause; in others, one of the several causes of the disease. But I venture to submit that it is erroneous to pay an almost exclusive attention to this cause, as has been done by some authorities on the subject, certain of whom have gone so far as to assert their belief that when not due to excessive sexual intercourse, general paralysis owns another form of sexual evil, namely, masturbation, as its exciting cause,

as if forsooth the life, both marital and non-marital, of men was but as an orgy of satyrs, either consumed with secret lust, or fitly partnered in salacious revelry with Bacchantes, lascivious of eye and wanton of limb."

In my own experience with the cases in asylum life, sexual excess seems rather to have been one of the prodromic symptoms, and not a cause *per se* of the disease. In an analysis of fifty-six cases, I attribute the disease in twenty-six to excessive and prolonged mental strain and overwork, supported by alcoholic stimulants; in sixteen, to intemperance and irregular habits; in four, to syphilis; in one, to sunstroke; in the remaining seven, the history furnished was so meagre as to render an opinion as to its causation little more than a guess.

In order to recognize general paresis in its incipency, careful inquiry should be made into the habits of the individual, the temperament, family history, age, etc., all of which will greatly aid in diagnosis. The symptoms, especially in the early stage, are somewhat vague; the mode of commencement is generally gradual, although the disease may begin suddenly, an epileptiform seizure being the initial warning to the patient or to his friends; or motor symptoms may be the first observed; some slight embarrassment or hesitancy of speech is noticed, especially if under excitement; aural tinnitus, flushing and heat of face and head, due to vaso-motor disturbance. If, however, the intellectual powers be involved, a change occurs in the disposition and habits of the individual. He becomes forgetful, is inattentive, his business transactions are ill-judged, he may be moody, dull, apprehensive, suspicious, irritable, full of hypochondriacal fancies, his memory begins to fail, especially for recent events, and he is unable to apply himself thoroughly to any work. It may be that his sexual appetite is increased; and not infrequently, in taking the history of these cases, the wife of the individual will admit that for some time previous to suspicion of disease on the part of friends, her husband's sexual desire has been almost insatiable.

More commonly, instead of depression, there exists an expansive, speculative frame of mind. He is exalted, active, busy, full of chimerical schemes, elated, easily excited, unnaturally loud in conversation; many of his friends, indeed, believe that he has taken a "wee drop too much," for the change in manner is the same which an extra glass of whiskey produces. Although naturally reticent, he becomes loquacious, confidential, button-holes people on the street, relates matters of a private nature about his family, their prospects, what he intends to do for them, etc.; is sleepless, although he does not complain of insomnia. His appetite is good, and he digests his food well. Perversion of the moral sense is one of the most important of the prodromic symptoms, especially from a medico-legal point of view. For some time, there may have been unwonted acts of indelicacy or impropriety. He may be led into all kinds of folly or crime, may make extraordinary purchases, commit thefts in the most open manner, and yet, aside from these changes, there is no absolute loss of intellect; he may become a little duller, less initiative; perhaps, to the casual observer, appearing in his normal condition, but a characteristic feature is, with but few exceptions, that all these changes occur unnoticed by the patient. He affirms that he is healthier than ever before, and any insinuation to the contrary serves only to irritate him. In one case, the first symptom shown of this perversion of the moral sense, was the fact of the patient's deliberately rising from the dining-room table, urinating in the corner of the room, and returning to his seat, as if nothing had occurred, much to the astonishment of those present.

The following case is given by Folsom, in *Pepper's System of Medicine*, vol. 5, p. 200: "A gentleman once committed an offence characteristic of general paralysis, in marrying a pretty servant girl while temporarily away from his home. His wife, daughters and friends saw that the act was so contrary to his natural character, that he was placed in an insane asylum, and kept there several weeks under observation for an opinion as to his responsibility. He appeared so well in the absolute quiet

and rest, that he was declared sane, tried and sentenced to the state's prison, where he showed his marked mental impairment as soon as he was set to work. He could not concentrate his mind sufficiently for the simplest labor, and, a couple of years later, he was sent to the insane asylum to die—a complete mental and physical wreck, in the last stages of general paralysis."

The motor symptoms are always to be most relied upon in making a diagnosis, and especially the character of the speech, and the slight fibrillary trembling of the tongue and muscles of expression, which quiver at times as if the individual were about to burst into tears. He does not articulate plainly, especially those words abounding in consonants; he drawls, slurs his words, as if there were some difficulty in bringing them out. The muscles about the alæ of the nose, and indeed, in marked cases, all the muscles of the face, may be involved. When the tongue is protruded, it is generally with a jerk, although this symptom is usually more marked in the later stages. These motor symptoms are of grave omen, and may not be noticed if the patient be calm and collected, but they manifest themselves under excitement, and often, in examination, it is necessary to irritate the patient in order to bring them out clearly. The finer movements suffer, as seen in the handwriting, which is sometimes shaky and irregular—letters, and even words, being omitted, from inability to concentrate the mind. In some few cases, the individual, especially in the melancholic type of the disease, appears to recognize impending calamity, as the following case illustrates:

"A—— B——, thirty-four; lawyer; good family history; ambitious, and a hard worker; indulges excessively in tobacco, often smoking fifteen cigars a day; has used alcohol steadily to support strength, writes: '*Dear Sir*—I am suffering from mental and nervous prostration. I should have had advice and consultation before. My friends are much alarmed at my condition, but no more than I am. I am assured, myself, that the condition under which I am, must be controlled at once, or worse results may be apprehended.'"

In this letter, the handwriting is unsteady, and, when admitted to the asylum, his friends stated that, in writing a brief, he would frequently misspell words, or leave them out altogether, much to his annoyance, and would often have to write a letter or legal instrument over half a dozen times to secure correctness. He attempted suicide shortly before being brought to the asylum, where he died two years later from general paresis, the motor and other symptoms being all well marked.

The following case is instructive, as showing the presence of motor symptoms before the intellectual faculties became involved, and occurred in the practice of the late Dr. John P. Gray. The history was related to me in the presence of a stenographer, so I am able to give it verbatim: "A New York broker consulted me in regard to his health. He was then forty-five years of age; married; family history excellent; of rather nervous temperament; a *bon vivant*, and inclined to over-stimulation, especially when under excitement on the Exchange. He told me that he felt nervous, that he left out a word now and then in writing a letter, and that, while in the midst of a column of figures, he would lose himself and become confused. He had some tremulousness of the tongue, and, in talking to me, the muscles of his lips quivered, and there was some drawling of the speech, but it was not marked. Of this, he was not conscious. He said he wanted a candid opinion as to his condition; that there were important monied interests which it was necessary for him to attend to, and if he was going to have an attack of a serious nature, he wished to settle up his affairs. He said further, that he was not himself conscious of any mental disturbance, or that he had failed to appreciate any financial transaction. He came again the following day, and I told him that, in my opinion, he was threatened with a serious affection, and advised him to settle his affairs as soon as possible. He then explained the financial transactions to which he referred. Some weeks afterwards, he came to see me again, and the symptoms had somewhat increased, but there was no marked mental disturbance. He said he wanted to understand my opinion very distinctly again.

I told him that I now felt quite certain that he had general paresis. He closed out his business, settled all his financial affairs, and, in the course of a few months, he rather suddenly developed profound paresis, both in its mental and physical manifestations, with utter indifference with regard to it. He lived but eighteen months afterward."

General paresis may be mistaken for chronic alcoholism, but the history of the case, the difference in the character of the tremor—that of general paresis being fibrillary, and having points of election; that of chronic alcoholism being more universal, especially in the hands and arms, when outstretched—the speech, that of the general paretic, having the character already described, while that of the alcoholic subject is thick, the words being muttered; and, finally, the mental state—the contentment and indifference of the paretic—will give, in most instances, sufficient data for correct diagnosis. Acute mania, with expansive delirium, may simulate this disease, but the absence of the true physical signs will serve as a guide. Then, also, the delusions of the general paretic are not of as fixed a character as those of acute mania, a contradiction not serving to irritate the patient so much. When, however, there is, in acute mania, great emotional agitation, together with muscular tremor, due to intense excitement, time may be required to make a diagnosis with any degree of certainty. Dementia with paralysis may be mistaken for general paresis, but the apoplexy, and subsequent more or less complete paralysis, and the gradual dementia, progressive from the date of attack, will exclude general paresis. Multiple cerebro-spinal sclerosis of the descending form, intra-cranial tumor, some forms of chronic lead-poisoning, and especially diffused cerebral syphilis, may all simulate, in the early stages, incipient general paresis.

In conclusion, I would repeat that, in the diagnosis of general paresis, the motor symptoms are always most to be relied upon, and in no case should a positive opinion be hazarded without them. In practice, these are best brought out by observation of the patient when under some form of excitement, or when, physically weary.

*GUN-SHOT WOUND OF THE CHEST, INVOLVING
THE BRACHIAL-PLEXUS, AXILLARY ARTERY,
ATTENDED WITH NEURITIS AND ANEURISM,
LIGATURE OF SUBCLAVIAN
ARTERY AND RECOVERY.**

By Dr. J. VAN DUYN, Syracuse, N. Y.

The following case, which I have to report, is one of gun-shot wound of the chest, involving the lung, the brachial-plexus and the axillary artery, followed by neuritis and aneurism, ligature of the subclavian artery and recovery.

O. B., October 17th, was shot, in the afternoon of May 22, 1886, while seated in a buggy trying to control a fractious horse. The ball, which was round, three-eighths inch in diameter, was one of nine fired from a shot-gun, at a distance of about six rods. It passed through the wagon-top, and entered the back one and one-half inch to the right of the eighth dorsal spine, and, as was afterwards determined by the location of the ball after it had lodged, it took a direction forwards, upward and little outwards, to a point directly under the middle of the right clavicle. This direction was possible, because of the position of the boy leaning forward when shot.

After the injury, there was immediate loss of power in the right hand, and the rein was dropped. I saw him half an hour afterwards, and found him with all the evidences of severest shock. He was pale, bathed in a cold sweat, almost pulseless, extremely exhausted, and incoherent in his utterances. Only the wound of entrance of the ball in the back could be found, which was bulging and crepitant, showing that the lung had been injured, and from it air had escaped along the track of the wound, and filled the tissues in its vicinity. Late in the evening, a swelling was found under the middle of the right clavicle, which was pointed, partly firm and partly compressible and crepitant. Until this time, there had been but little cough, without expectoration. Deep respiration now caused pain, not

*Read before Central New York Medical Association, at Syracuse, N. Y., November 15, 1887.

only in the chest, but also in the right shoulder and elbow. The first and second fingers had become numb at their extremities. Immediately on seeing him, I administered brandy and morphine, which were repeated twice in the evening, and at eight o'clock, P. M., he slept. At eleven o'clock, P. M., he vomited, with great force, large quantities of solid and liquid matter, after which he slept. On the following day, at five o'clock, A. M., he coughed up a small blood-clot, and a number of small clots of blood in the afternoon. Through the day, there was pain in the chest, mental wandering, pain also in arm and back, and great restlessness. On the third day, there was great dyspnoea and excessive heart's action. Although auscultation had been practiced from the first to determine the condition of the lung, which manifested itself by an almost entire absence of respiratory movement and no rales, no sound connected with the circulation had been discovered. But now, over the tumor, under the clavicle, there was a rough sound, synchronous with the cardiac systole. From this time on, the dyspnoea gradually improved, and the normal vesicular respiration sound reappeared in the wounded lung. The percussion note became more resonant as low as the fourth and fifth rib, where, until then, it had been flat. The tumor under the clavicle was less prominent, and there was increasing distinctness in the determination of a foreign body, which could be no other than the ball. In front, crepitation was lost in the swelling, but behind, at wound of entrance, it persisted. The pain in the arm was complained of continually, on the radial side, from the elbow downwards into the thumb and first and second fingers. Both fingers were numb, but, over the area of pain in the arm and thumb, there was marked hyperæsthesia. The first temperature record was made on the morning after the injury, when it was 101.5° , rising in the evening to 102° . The temperature fell on the fourth day, and from that time until the end of the record, never rose again above 100.5° . On June 6th, fifteen days after the injury, no crepitation could be felt in the wound in the back. Condition greatly improved, but patient complained of the pain in the right arm. On June 14th, twenty-three days after injury,

I removed the ball from where it had long been felt, under the middle of the right clavicle. To-day, Dr. Breed made tracings of the pulses of both radials. To the finger, that of the right side was the feeble, and seemed to have a different character from the left. The tracing by the sphygmograph, however, shows no essential difference, and represents only a frequent, dicrotic pulse on both sides. This pulse trace corresponds almost exactly with that of October 11th. After removal of the ball, there was no swelling left under the clavicle. June 19th, I made the following observation on the effect of the nerve injury. The pain in the arm, from the elbow down, very severe, and alternates with sensation of burning. The temperature in the web between the first finger and thumb of the right hand was 97.8° ; of the left hand, 98.4° . The thermometer grasped in the carpo-metocarpal joints of the ulna side of the right hand showed 98.3° , or $.5^{\circ}$ higher on this than on the other side of the same hand. The temperature under the tongue was 98.7° . Pulse, 104° ; respiration, 18° . The finger-nails had not been cut since the injury, because of the pain which the attempt to cut those of the thumb and first finger produced, and now, twenty-eight days afterwards, the free ends of the nails of the ring and little fingers were three times longer than those of the thumb and index fingers. Besides, the palmar skin of the thumb and first finger was horny and separating in flakes, while that of the ring and little fingers was soft, smooth and unbroken. It was interesting to note that the middle finger shared in the condition of both sides of the hand. For the two days following this examination, the pain in the right fore-arm and hand, alternating with burning, was so severe as to prevent all but one hour's sleep in forty-eight hours. The temperature under the tongue rose to 100.5° . June 24th—Has no sensation of burning during the past thirty-six hours, but little pain in the day-time, pain more or less severe at night. On July 1st, the young man went to the Thousand Islands, and remained there until October 1st. During this stay on the St. Lawrence, pain and burning in the arm and hand was felt only during damp, rainy weather. But there was added a new sensa-

tion : a numbness of the whole right hand, or of a part of it, at one time of one region, and at another time of another region ; which, with some intermission, became quite continuous. This may be explained by the fact of a tumor, which was first noticed in July, showing itself where the ball had been cut out under the middle of the right clavicle. When he returned October 1st, I found this tumor to be quite prominent, smooth, distinctly fluctuating, and having the impulse of the artery behind it. Over the tumor, the pulse was heard with a rasping sound. Pressure on the tumor produced severe pain and pricking in fore-arm and hand, in the exact region where the pain and burning had been felt before. This tumor, now known to be an aneurism, connected with the axillary artery, explained the numbness which began to be felt in July, as well as the rasping bruit which was heard here since the second day after the injury. On October 10th, when we made an examination, we found the arm practically useless. The reaction to faradism was lost in the radial group of muscles, except feebly to the strongest currents, and all the remaining muscles of the fore-arm and hand reacted but feebly to ordinary currents. Anæsthesia was clearly limited to the radial side of the fore-arm and hand. Here we had, doubtless, the double effects of the original injury to the brachial-plexus, and of the presence due to the growth of the tumor. I exhibit the pulse traces kindly taken by Dr. Breed. These show none of the signs of aneurism, but rather of a great loss of arterial tension, frequent heat action, and quickness of pulse current. The right arm, fore-arm and hand were atrophied. The circumference of the right arm was $21\frac{1}{2}$ cm.; of the left, $24\frac{1}{4}$ cm.; of the right fore-arm, 22 cm.; of the left, 24 cm.

November 2d—Although the patient was able to sit up, move about and go to his meals in the fourth week after he was wounded, and had been able to spend three months at the Thousand Islands in semi-activity, yet, from the first shock, he had never regained his vigor. He was tall for his age, flabby, weak, and had an over-active heart and feeble pulse. There was no question as to the necessity of surgical interference for the

cure of aneurism, which, if left uncured, would destroy his life. But, under these conditions of general vigor and condition of tissues, an operation of the magnitude of that of ligature of the subclavian artery was to be thought of only with forebodings of a bad result. On this date, I determined to confine him to bed, hoping that, by rest and feeding, his condition would improve. Accordingly, he went to bed in a quiet part of the house, avoided all company, and led a life of quiet vegetation. On the second day thereafter, November 4th, examination showed he had quite lost the power to abduct the arm, rotate the fore-arm, and extend the fingers. He was kept in bed, where he greatly improved in all respects continuously until January 17th of the present year, eight months after the injury, when it seemed best to operate. Accordingly, in the presence of Drs. Dunlap, Mercer, Breese, Loomis and Hinsdale, the patient having been anæsthetized by ether, I ligated the subclavian artery with double gut ligature, cut short, on the first rib. The operation was performed in the usual manner, as directed in the books, with the ordinary antiseptic precautions, without the spray. The wound was closed by eight chromicized cat-gut sutures, without drainage, and was covered by gauze filled with iodoform. On the third day, I removed the dressings, and found that there had been but little extravasation from the wound, and that wound and stitches were dry. Union was found firm and complete, and I removed the stitches. During the performance of the operation, all went smoothly, except that while forcing my way on the scalenus down to the artery, and when within a considerable distance above the artery, the tissues suddenly gave way, and my finger entered a large open cavity. This was investigated, as far as it was thought safe, but without any conclusion being reached as to the origin of this space, which was finally disregarded, and the operation proceeded with. In the morning, after operation, the temperature rose to 101.4° , but fell in the afternoon to 99.4° . There was no subsequent rise above 100° . On January 26th, nine days after the operation, the thermometer, grasped in the right hand, showed 98° ; by the left hand, 98.5° , while the tem-

perature under the tongue was 99.5° . On January 29th, I could count the pulse of the right wrist, but with the greatest difficulty, because it could be perceived only with the nicest condition of pressure. After the operation, all numbness in fore-arm and hand disappeared, but could be reproduced by pressure on the aneurism. This could be produced also by pressure anterior to elbow in middle line, the numbness and pricking even affecting the end of second finger. On February 13th, a testing of the length of the finger-nails showed no difference in their growth since the operation. The temperature of the hands was found equal. March 21st—Is rapidly regaining his strength and vigor. At times, the right hand becomes numb while he is walking, but the numbness disappears at once on supporting the hand. Having just come in from a temperature of 37° , the right hand is felt to be quite cold objectively, but the left is warm. He says he does not feel the difference, and knows of it only by bringing the hand in contact with some other part of the body. The aneurismal tumor smaller. Until he had been in the room sufficiently long to get warm, I could not perceive the pulse in the right radial to count it, but as the hand became warmer, the pulse became distinct, and could be counted. There remains a woolly feeling on radial side of index-finger and inner side of last phalanx of the thumb. The strength of the grasp of the right hand is marked by 80° of the dynamometer scale, but the instrument is not stiff enough to record the strength of the left hand. September 5th—The strength of the right hand cannot be measured by my dynamometer, but there is a marked clumsiness in the functions of the right hand, and there remains the slightest fuzziness in thumb and first finger. The circumference of the left fore-arm is greater than that of the right by 1.9 cm., and the temperature of the left hand is $.7^{\circ}$ higher. The only other condition which I shall speak of, and which is worthy of note, is that of the eyes. While being taken home after the injury, he was seized by an attack of blindness, consciousness remaining, which lasted but a few moments. A second such attack occurred at the dinner-table, five weeks after the first. After this,

they followed in quick succession, or often sometimes as twice in a day, but, generally, twice in a week, until the operation, after which they did not occur. After the first blind attack, he was troubled by floating bodies in the eyes, which, at the time of last consultation, one month ago, had not disappeared. Vision was $\frac{3}{8}$, and no abnormal condition was revealed by ophthalmoscopic examination. The cause of this is not clear. It is evident that the blindness for the time being, and the floating bodies, had a common origin in the wound of the brachial flexus, and that the immediate effect of the injury to the nerve on the vascular supply of the eye, was continued by the pressure of the growing aneurism on the nerve, for, as soon as this pressure was relieved by the ligation of the subclavian artery, the recurring vaso-motor spasm of the eye ceased.

Besides, the many points in the history connected with lung, artery and nerve injury, which, for want of time, I must refrain from reviewing, I call attention to the operation itself, to the contrast between the operation of to-day and that of twenty-five years ago, at the time of the war. Then it fell to my lot to witness an operation for a similar injury. It was performed according to the rules then enforced, the wound was dressed with water, the long silk ligature hung out of the wound, which suppurated, and the soldier died of pleurisy and exhaustion. In the present case, there was no suppuration, no suppurating constriction of the vessel, and, as far as the operation was concerned, all was well in three days. The statistics of operation have entered on a new series, and this record is offered for its proper place and value.

Translations.

ON THE SUBCUTANEOUS INJECTION OF BLOOD, INFUSION (SUBCUTANEOUS) AND INTRAVE- NOUS TRANSFUSION.

A Translation of an Abstract by Oehler, in the *Centralblatt für Chirurgie*. of Ziemssen's paper on this subject.

By FRANK A. HARRINGTON, M. D., Assistant to the Chair of Materia Medica,
Niagara University.

Ziemssen states, in the first place, that it is nonsense to discuss intravenous transfusion: it is attended by so many dangerous phenomena, such as chills, fevers, albuminuria, hæmoglobinuria, etc.; instead, it should be considered an operation directly endangering life. However, this unfortunate result is not dependent on the introduction of defibrinated blood, but in the manner of performing intravenous injection, by which altered blood, containing ferments, unavoidable flocculi of fibrin and air-bubbles, are injected into the vessels. It is proven that all dangers are obviated if the blood be injected into the subcutaneous cellular tissue. Ziemssen's process is: blood, completely defibrinated, which must be carefully used with aseptic precautions, and preserved at a temperature between 37° and 40° , is injected, by means of a syringe containing twenty-five cubic centimeters, into the subcutaneous tissue, preferentially into the thigh, and forcibly rubbed by an assistant. This massage is a very necessary step in the procedure. When a larger amount is to be introduced, Ziemssen claims it is absolutely necessary that the patient be anæsthetized: the operation is attended with so much pain; that is an objection to the process. Each syringe-ful is injected into a different place. Very large amounts can be injected, and Ziemssen has used as much as 350 grammes, introducing it at fourteen distinct places. To mitigate any pain succeeding the operation, an ice-bag is applied, and the patient kept quiet. In the first place, the affair is unaccompanied by danger. Only in two cases was any suppuration noticed, and that, a consequence of trifling mistakes that were rectifiable. No fever, no chill, no albuminuria, no symptoms of hæmoglobinuria succeeded. The subcutaneous cellular tissue serves as an excellent filter to retain the ferments and air-bubbles, while the red

corpuscles easily and quickly pass through. As evidence of this, you find, after a few days, no trace of free blood, while, in the circulation, the hæmoglobin is shown to be increased. In the first twenty-four hours, this increases in many cases twofold. To be sure, this result is not a certainty; oftener, during the ensuing four or five days, there is a slow decrease of hæmoglobin down to a stationary amount, which is, nevertheless, always greater than the original amount before any injection. By a repetition of the operation many times, the hæmoglobin increases more and more, until ultimately it reaches the normal standard. Hand in hand with that, there goes on an evident increase in the number of red corpuscles. Ziemssen, in this way, succeeded in curing, in the course of a month, various forms of chronic anæmia of a bad type. In cases of acute anæmia, after a large loss of blood, Ziemssen has not tested his method; still he believes the subcutaneous injection of blood is indicated in such cases. Of course, when delay is dangerous, and when, for some reason, this injection of blood cannot be made, Ziemssen employs the subcutaneous injection of salt and water. This, again, has the advantage over intravenous injection, of being easier performed, and wholly without danger. It is not necessary to use distilled water; any spring water, provided it has been well sterilized by boiling, can be unhesitatingly injected. The subcutaneous cellular tissue retains any foreign solid matter after it has been made aseptic. The water is so easily absorbed, that anæsthesia can be dispensed with. To introduce 600 grammes of water, one needs to make four or five punctures. If, in the injection of water, the danger is met with dependent on an "empty heart," then should the injection of blood be quickly prepared; for, as experience teaches, the injection of salt and water merely delays, not prevents death. In such a case, fresh blood must be introduced into the body. We hope these methods of transfusion will also be useful in acute anæmia.

At all events, the small pamphlet by Ziemssen, written in so clear and masterly a manner, offers much of clinical interest in the important subject of transfusion.

Society Reports.

ROCHESTER PATHOLOGICAL SOCIETY.

Regular Meeting, October 13, 1887.

Reported by EDWARD B. ANGELL, M. D.

DR. B. J. PRESTON presented a paper on "Retention of Urine in Elderly Men," the cause of which was usually enlargement of the prostate gland. Special emphasis was given to the danger of overlooking vesical distension when there was constant dribbling of urine.

In these cases, relief must ordinarily be secured through catheterization. For this purpose, he recommended that a soft rubber catheter be used first. In case of failure, an old man's silver catheter may be tried. The vertebrated catheter is also very useful in obstinate cases, while, with the aid of an Otis guide, the writer had only failed once, and failure then was due to the presence of a false passage, the result of effort by a former attendant.

If the bladder is greatly over-distended, it is not safe to withdraw its contents suddenly, as fatal collapse has ensued under such circumstances.

The after-treatment requires washing out of the bladder two or three times a day with a little warm water, to which is added boracic acid or a little carbolic acid. He advised rest in the recumbent posture, the use of anodyne suppositories, frequent cleansings of the bladder, and maintenance of free action of the bowels, with a properly-regulated diet. Avoidance of sexual indulgence, horse-back exercise and sudden colds was particularly enjoined.

In the subsequent discussion of the paper, Dr. E. N. HOWARD described the method of catheterizing old men at the almshouse. A gum catheter was employed, the wire guide of which was withdrawn about an inch, thus securing steadiness, with sufficient flexibility at the entering end. He suggested that, sometimes, the difficulty may be overcome if the urethra is made taut by stretching the penis upward. The eye of the catheter may be freed from clots by using a syringe with warm water, which, by-the-by, would often assist the introduction of the catheter. He also referred to the importance of keeping diagrams of an old man's urethra from time to time when possible. Cocaine he had found of service in cystitis, using a weak solution as an injection.

DR. CARPENTER cited a case in which he was able to enter the bladder with a linen catheter having an olivary point, after failure with other means.

DR. ROSEBOOM had relieved one case very materially by the passage of a steel sound.

DR. ANGELL suggested electrolysis as worthy of trial, believing that permanent good might be gained thereby, the gland itself reduced in size, and the calibre of the prostatic urethra enlarged.

DR. CONKLIN referred to the extreme liability to cystitis in these cases. He had found the injection of a solution of two grains of quinine in half an ounce of warm water very beneficial for the relief of pain and spasm; while spasm was diminished and desire for frequent urination lessened if half an ounce of water was left in the bladder.

DR. L. H. SMITH expressed his preference for a catheter with an olivary point. Often a fold in the mucous membrane interfered with the passage of the catheter. This fold could be easily drawn forward, and the obstruction smoothed out, with the finger in the rectum.

DR. WEIGEL referred to the importance of thorough lubrication. By injecting oil into the catheter, much assistance might be gained in obstinate cases.

DR. STARR had succeeded by passing the catheter as far as possible, and then injecting a solution of cocaine to relieve the congestion and sensitiveness. He was waiting for a patient who would permit him to operate by cutting the gland as in the operation for stone, since the operation in all cases prevents retention of urine.

DR. BACKUS said that fifty per cent. of all cases of general paresis have enlarged prostate.

DR. O'HARE feared enlarged prostate as a forerunner of serious trouble. He had used infusion of barberry and buchu with much benefit.

DR. W. R. HOWARD advised the use of mercury to reduce the size of the gland, and the injection of a solution of pepsin to remove blood-clots in the bladder.

In reply to a question as to a means of resort in case of failure by catheterization, DR. PRESTON advised supra-pubic aspiration, a method of relief often resorted to of late.

In the report of prevailing diseases, it is worthy of note that twenty-one cases of acute jaundice were recorded, ten of them being children under five years of age.

CATTARAUGUS COUNTY MEDICAL SOCIETY.

The semi-annual meeting of the Cattaraugus County Medical Society was held at the rooms of DR. LYMAN DICK, Salamanca, N. Y., December 7, 1887. The meeting was called to order by the President, DR. O. A. TOMPKINS, of Randolph, N. Y.

The minutes of the last meeting were read and approved. The Secretary was authorized to publish a list of the names of all the physicians registered at the County Clerk's office, and to mail a copy to each member of the Society. The names of eight physicians were presented for admission, and by unanimous vote all were elected members of the Society. DR. V. A. ELLSWORTH, of East Otto, N. Y., was elected delegate to the State Medical Society. DRs. A. A. HUBBELL and H. D. INGRAHAM, of the Medical Department of Niagara University, Buffalo, N. Y., were present by special invitation.

DR. INGRAHAM read a very interesting paper on "Some Points in Abdominal Surgery." He spoke more particularly on abdominal section, and urged the proper preparation of the patient, of the operating-room, and of the instruments to be used, before the operation, and proper diet, nursing and after-treatment after the operation.

DR. INGRAHAM also presented, by request, O'Dwyer's instruments for intubation of the larynx, and described the methods of using them. The Doctor had had quite a large experience in their use in membranous croup, and while he had not been very successful with them in saving life, yet he advised their use, as the patients were thus enabled to breathe easily, and were made comfortable. In some cases, they no doubt saved life, although in this respect he had, so far, failed.

DR. HUBBELL read an interesting paper on "Eye Symptoms in Disease." He referred to those eye troubles which were functional, and those which showed local structural lesions that might be looked upon as important symptoms of diseases elsewhere in the body. Paralytic and spasmodic affections of the extra-ocular and intra-ocular muscles were dwelt upon, and their significance pointed out. The indications of the state of vision were also referred to as suggestive of diseases of the nervous system. He concluded with a brief description of those eye diseases exhibiting structural changes locally, and their symptomatic relation to other diseases. He illustrated his subject with several beautiful plates, and with diagrams.

DR. DICK gave a microscopical exhibition of the "Bacillus Tuberculosis," and demonstrated the rapid method of staining, according to the recent formula of Prof. Burrill.

Other papers were presented, but they were not read, owing to the limited time.

The reading of the papers was followed by discussion, after which the meeting adjourned to meet again on the first Wednesday of June, 1888.

The attendance was unusually large, and the meeting was pleasant and satisfactory.

LYMAN DICK,
Secretary.

Miscellany.

ANTISEPTIC TREATMENT OF INTESTINAL AFFECTIONS.—In an article on "Intestinal Antiseptics," by D. N. Kinsman, M. D., appearing in the *Journal of the American Medical Association*, July 3, 1886, the author points out that the natural processes of fermentation and putrefaction going on in normal digestion are so changed in dyspepsia and other forms of intestinal diseases as to produce poisonous alkaloïds, which are the cause of the symptoms developed in such disorders.

The researches of Prof. Vaughn, of the University of Michigan, in which tyrotoxicon has been shown to be the cause of ice-cream poisoning, which are still fresh in the minds of medical readers, have thrown still more light on the etiology of intestinal affections, and made apparent the importance of intestinal antiseptics as a method of treatment.

To facilitate such treatment, we learn that Parke, Davis & Co. have recently added to their list an intestinal antiseptic pill, the formula of which is as follows: Mercury protiodide, $\frac{1}{8}$ gr. ; podophyllin, 1-16 gr. ; aloin, 1-16 gr. ; ext. nux vomica, 1-16 gr. ; ext. henbane, 1-16 gr.

THAT TERRIBLE DISEASE—THE DIVERS.—Governor Taylor, of Tennessee, recently heard of a colored minister who preached a sermon on the text: "And the multitudes came to Him and He

healed them of divers diseases." Said he: "My dying congregation, this is a terrible text! Disease is in the world! The small-pox slays its hundreds, the cholera its thousands, and the yellow fever its tens of thousands, but, in the language of the text, if you take the divers, you are gone. These earthly doctors can cure the small-pox, cholera and yellow fever, if they get there in time, but nobody but the good Lord can cure the divers."

NINETY TAPE-WORMS AND ONE GIRL.—Dr. Roux, surgeon of the Cantonal Hospital, in Lausaune, reports a case in which the patient, a girl aged twenty-two and a-half years, discharged (after two six-gramme doses of extract of male fern,) at least ninety bothriocephali. The worms passed out in a bundle, the patient assisting the delivery by tearing the package with both hands, at the same time uttering shrieks like a woman in labor. Except some slight phenomena (such as occasional headaches, vivid dreams, semi-somnambulism), the patient did not present any morbid symptoms.

The following is recommended in the *Revue de Thérapeutique* as a nutrient and sedative enema:

R	Bouillon of beef	℥ iij. ʒj.	
	Eggs	j.	
	Bordeaux wine	℥ vj. gtt. xv.	
	Sodium bicarbonate	gr. viij.	
	Tincture of opium	gtt. iv.	
	Chloride of sodium	gr. iij.	
	Peptone	℥ iv.	M.

SICK MAN (gloomily)—"If I should die, dear, what in the world would become of you and the children?"

Wife (cheerfully)—"Now, you must not worry, John; the doctor says it is bad for you. I'll find some one to take care of us." The sick man got well.

It is claimed that in Cincinnati a doctor in a close carriage can persuade people that he knows much more than a doctor on foot.

AN EXPERT.—“I suppose,” said the stranger, as the group of tired travelers were discussing the nature of the malady from which the German Crown Prince is suffering. “I suppose I have had as much experience in the treatment of malignant and rapid throat troubles as any in America.” “Ah, you are a physician, then?” “No,” said the stranger, “not exactly, but for six years I was chairman of a Texas vigilance committee.”

THE editor of the *Pacific Medical Record* is rather severe upon the Gynæcologists when he says: It is safe to say that more than half the revenue of the physicians of the world is derived from the treatment of females; and if we say that nine-tenths of the number thus treated have no need of that treatment, and that it works actual harm, we shall utter the truth.

It is difficult to make the whole medical profession happy on the subject of International Congresses. A leading French medical journal considers the selection of Berlin, as the place of the next meeting, a positive insult to France, and adds that the Congress will not be an international one, but merely a German reunion.

A WRITER in the *Kansas City Medical Index* says that the fees of doctors are ridiculously low in St. Louis. A few physicians charge two dollars a visit, but most visits are made for one dollar, and many for fifty cents. Office practice is from fifty cents to one dollar. Much office work is done for twenty-five cents.

GONORRHOEA AND STERILITY.—Dr. William Goodell says: Personally, I cannot recall a case in which a woman bore a child after suffering with gonorrhœa. Strumpets rarely become pregnant, for most of them have had this affection.

DRUNKENNESS and delirium tremens have so increased in Berlin, that the medical profession is considering the necessity of recommending the government to reduce the number of places where intoxicating liquors are now sold.

DOCTORS IN RUSSIA.—A recent report of the members of the profession, in proportion to the population in Russia, gave one doctor to 18,000 people. This is the only civilized country where overcrowding is not present.

Selections.

DOSIMETRIC THERAPEUTICS AS APPLIED TO PNEUMONIA AND BRONCHITIS.

The system of therapeutics, as taught by Dr. Ad. Burggraeve, by which he claims to arrest acute maladies by the prompt exhibition of alkaloids in minute doses, at frequent intervals, is among the recent innovations in the field of medicine. The "jugulation of acute diseases," as Dr. Burggraeve styles his system, is on trial in all countries, and many eminent practitioners report the new system of dosimetry, as it is termed, productive of good results. The essential fevers in particular are benefited and abridged by dosimetric methods; diphtheria is more successfully combated; and pulmonary affections of acute type rapidly relieved. These are a few of the results claimed by Dr. Burggraeve and his disciples.

To illustrate the subject, I extract from the *Dosimetric Medical Review* two cases—one of pneumonia, the other of acute bronchitis—as reported by Dr. Ferran. Although the first case was treated before the preparation of the dosimetric alkaloidal granules by ch. Chanteaud & Co., of Paris, still it will be seen that the treatment is practically the same, and that the granules could have been substituted, with less trouble and more accuracy, for the solutions used by Dr. Ferran. The foundation of treatment in acute pulmonary attacks is pilocarpine, as employed by Dr. Ferran. Case II. better illustrates dosimetric therapeutics than Case I, which is mainly to show the applicability of dosimetry to pneumonia, as well as to bronchial inflammations.

DOUBLE PNEUMONIA (COMPLETE).

CASE I.—On a night of the month of March, 1878, I had just placed myself at table, when an adjutant of the Sixth Artillery, Mr. Irleman, entered my house much perturbed. "My son has just arrived from the Lyceum," he said, "and he is going to have the croup, for he can no longer draw his breath, and is suffocating." I went to the child, who was thirteen or fourteen years of age, and I found, not an affection of the larynx, but a double, complete pneumonia; so complete was it, indeed, that the respiration came only in a light wave of air from the inferior part of the right lung; the little patient was in reality commencing to suffocate.

I had never seen so generalized a case of pneumonia, and I had no doubt however that, with the habitual medications, this case would have been promptly mortal. I did not fail to instruct the father as to the gravity of the situation.

Nevertheless, a certain peculiarity which I had often observed came to my mind, viz., that in the treatment of pneumonia, the respiration is freer and the general condition more reassuring while the patient is perspiring. Consequently, I thought of having recourse to the infusion of *pilocarpus jaborandi*, for at this epoch its alkaloid, pilocarpine, was scarcely known, and did not exist in pharmacy. For a greater security, I did not care to use the commercial leaves, so often valueless, and employed the jaborandi pills of one of the importers.

A first dose (five grammes) was administered at once in three parts in infusion, one cupful at a time; then, a second in eight and a-half hours, followed by a third in ten hours. The habitual muco-salivary sputa, as also the transpiration, was enormous. But, after ten o'clock at night, respiration was ample, and after eleven I could easily see that my patient was saved.

On the morning of the next day, there was a fluxionary return, and in the evening a return of the fever; but the congestion occurred only in isolated points, and was not a serious matter. The continuation of the transpiration treatment, together with tinct. aconite in minute doses with revellents, arrested the fever and the congestion within three days—a result which would have been reached still more promptly with the use of the defervescent granules.

Without doubt, the effects of rapid decongestion obtained on this occasion with jaborandi may be attributed to the fact that the congestion was recent. But these effects are not the less marvelous, and are wholly beyond comparison with those obtained with the ordinary medicines.

Since that time, I have had occasion to employ jaborandi, or the nitrate of pilocarpine in granules, on several occasions in partial pneumonia, and their prompt efficaciousness has always been manifested.

The effects of the nitrate and the chlorhydrate of pilocarpine are much less irritating upon the stomach than those of jaborandi, and are always sure, while those of the leaves of the plant are uncertain, and the salts are also infinitely more convenient for administration, particularly for children. It follows, therefore, that pilocarpine should be substituted wherever possible for jaborandi.

When we wish to obtain from pilocarpine its sudatory effects, the average dose for an adult should be twenty-five granules, administered in two portions with an interval of from two to five minutes. It is indispensable to give them fasting, otherwise they incite painful vomiting. But the effects of sudation are always preceded by a very abundant mucus and salivary discharge, which makes itself felt upon the larynx and the bronchial passages. It also happens at times that the medicament incites contractions at the neck of the bladder. For this reason, it is well to cause patients to urinate before taking it.

But the anti-congestive action of pilocarpine is not confined to pneumonia; it is exercised in no less remarkable a manner in laryngitis in bronchitis of whatever nature they may be. I could cite very many examples of this, but as they all resemble each other, I describe only such cases as are most interesting from a practical point of view.

INFANTILE BRONCHITIS.

CASE II.—In the bronchial affections of children at the breast, the nitrate of pilocarpine in granules is a precious medicament, not only on account of the attenuated doses in which it may be administered, but from the fact that it is tasteless. Striking examples of the advantageous use of the medicament in such cases, are shown in the following notes:

At L.'s house, civil engineer; child five months old; heavy attack of bronchitis during the night. On January 17th (morning), I made my first visit; a looch of white oxide antimony upon the night table told me that a gentleman of the Old School had preceded me. The medicament had been prescribed by a confrere, but no one could prevail upon the child to take it. Thanks to Chanteaud's dosimetric granules, my treatment was much better carried out, and it was in other respects an improvement. At nine o'clock in the morning, ten minutes after my visit, the child took a first granule, which was perfectly well retained. Then half a granule was given every half hour and, later on, every hour, after having swaddled the child in warm flannel. At the end of three hours of this treatment, amelioration was manifested by a diminution of the cough; and toward two P. M., the relatives, who up to that time had been very anxious, made the joyful discovery that the child took with avidity the breast-milk it had refused on the previous evening. During the same night, he was able to sleep in his cradle—

which he had not done for two days—and by the middle of the following day, everything went on as usual.

[The writer gives another case in a child of seven months, in which the treatment was equally prompt and efficacious, the patient being cured in a very few hours.—ED. D. M. R.]

I may cite another case, a child of thirteen months (though not yet weaned), who had been suffering for three days from bronchitis, and had a very intense fever. At my visit on the sixth of the month I, found by auscultation an obstruction of all the superior part of the right lung, which had become impermeable to respiration, and there were faint rales at the inferior part. The cough was frequent and intense; the nares dilated at each inspiration, and the horizontal position was impossible.

Prescription: The child to be swaddled in linens and flannels, and in an outer covering of worsted; four granules of pilocarpine; one at once, then a half granule every half hour (in solution). When transpiration was well established, four granules of aconitine to be given, one-half a granule at a dose. In the night, two granules of pilocarpine, two of aconitine and one of brucine to be taken in four doses, *i. e.*, from hour to hour.

During the same night, the child became more tranquil, and respired more freely.

On the 7th and 8th, the same treatment was continued in decreasing doses, according as the degree of progress toward amelioration became visible. On the morning of the 9th, this amelioration seemed to me so far advanced, that I discontinued my visits. Since this time, the child has enjoyed good health.

I limit to the foregoing my citations of the cases of pneumonia and bronchitis cured rapidly by the use of Chanteaud's granules of pilocarpine, aconitine, etc. A large number of similar cases would only fatigue the attention of the reader, while it could not add to the value of these citations as applied to every-day practice. I believe I have said enough to attract the attention of all who seek only for the truth in good faith and with unprejudiced minds. As for others, what I write does not concern them, and these I shall never make any effort to convince. They will finally be obliged, however, to give way to the evidence of facts; the public will have something to say about that matter.

TYPHOID FEVER.

During the months of July and August, twenty cases of typhoid fever were treated in the Hospital of Notre-Dame, Montreal; seventeen recovered, three died. A resume of the treatment in those cases is as follows: As long as the temperature did not reach 103° Fahrenheit, no antipyretic was exhibited; it was believed that it was then perfectly useless to attempt to lower a temperature that, by itself alone, would not endanger life. When the temperature rose to 103° Fahrenheit or higher, antipyrine was administered, in a fifteen to twenty grain dose, at three o'clock in the afternoon, and a second dose of the same number of grains at five o'clock. The temperature rarely in such cases failed to fall 2° to 4° , and to remain so for six or eight hours. The doses are repeated the day following at the same time if the temperature reaches 103° ; at the same time, quinine is prescribed in accordance with the method of Pecholier, grain twenty to twenty-five a day; one and a-half to two grains every two hours. Salicylate of soda has not been employed. To combat the thirst, lemonade with a small percentage of hydrochloric acid has been drank. To prevent dryness of the tongue, glycerine has been smeared on; this has succeeded in the majority of cases, and the patients experienced marked relief from that trouble. In cases of diarrhoea, water impregnated with carbonic disulphide, or, in absence of this, bismuth has been prescribed with the object of rendering the intestinal tract aseptic and, at the same time, of diminishing the frequency of the stools. Finally, when the pulse had a tendency to dicrotism or feebleness, alcoholic stimulants were used: cognac, sherry, champagne, in doses of four, six, eight, ten, twelve, fifteen, sixteen ounces in twenty-four hours, according to circumstances. A liquid diet, easy of digestion, as jelly, eggs, milk, &c. Rest in bed even in cases of walking typhoid. Sleeplessness, if troublesome, has always been treated with chloral (fifteen to twenty grains), given by the mouth or by the rectum when there was no diarrhoea.—*L'Union Medicale du Canada.*

TREATMENT OF INTERNAL HÆMORRHOIDS BY INJECTION.

By M. F. CLAUSIUS, M. D., Beecher, Illinois.

In the *Medical Record* of June 25th, my attention was called to an article communicated by Dr. Shuford, of Tyler, Texas, regarding the

treatment of internal hæmorrhoids by sub-mucous injection. To accomplish this, it is necessary to have an instrument that can be introduced with but little pain, and then so constructed as to expose as much of the mucous membrane as possible. Having introduced the speculum, the center of the hemorrhoidal tumor should be brought into plain view, and puncture the needle at that spot, as it is less sensitive here than elsewhere.

For this procedure, a long needle is required; if possible it should have a guard near its point so as not to enter too deeply. The following solution is recommended:

℞—Acid salicylas
 Sodæ biboratis aa. ℥j.
 Glycerinæ ℥iij.
 Acid carbol ℥ij.

M. Sig.—Mix well and let stand for a short time, after which it will become perfectly clear. Of this solution, three to five drops are used for small tumors, and five to eight drops for larger ones.

This will cause them to become atrophied, and shrink up and peel off without pain, inflammation or suppuration. Each tumor ought to be injected separately. An interval of from eight to ten days should elapse between the injections, so that the mucous membrane becomes toughened.

The doctor reported many cases, all with good results. I happened to have, at the same time, a patient suffering from this trouble. I had used on him equal parts of glycerine and carbolic acid, and injected a few drops into the tumor, but this seemed to act rather slowly. I at once prepared the foregoing recommended formula, and used four drops for each tumor. I had to repeat this but twice, and the tumors have perfectly disappeared. The injections caused hardly any pain. The man, a farm laborer, could pursue his ordinary work, and has now fully recovered.

TREATMENT OF CORNS.

Clinic of Dr. LEWIS A. SAYRE, at Bellevue Hospital.

The first thing to do is to wear well-fitting shoes. With shoes sufficiently large to allow expansion of the foot in walking, you will have no corns; but, if any exist, it is necessary to remove them.

Begin by paring the corn, shaving off the epidermis with a sharp instrument, but without provoking bleeding. Afterwards, cauterize the surface with a crayon of nitrate of silver. In this way, you cause the elimination of the kernel, which you could not do with a bistoury without bleeding. Now smear the corn with diachylon; wrap a narrow bandage around, of sufficient thickness to prevent pressure.

If it be a soft corn, the best treatment is cauterization with nitric acid or nitrate of silver. After having removed, with a penknife or scissors, the superficial hard part of the corn, dry the surface, and apply caustic. The first cauterizations are generally painful, but the results are excellent.

After the cauterization is finished, insert between the toes tampons of cotton in a way so as to permit the circulation of air; at the expiration of several days, remove with forceps the eschar made by the caustic, and repeat the cauterization. The second cauterization is ordinarily painless, and rarely has to be repeated.

TREATMENT OF EPISTAXIS.

Dr. J. Robinson, of Kansas, speaking of the treatment of this affection, in the *Therapeutic Gazette*, says:

It is a well-known fact to anatomists and others, that the hemorrhage in the vast majority of cases proceeds from the septum-nares, and is supplied by a branch of the superior coronary, a branch of the facial, which ramifies in the septum-nares. It enters the opening of the nose just below the alae nasi, crossing the superior maxillary bone at that point.

Now, in a practice of nearly thirty years, I have had many cases of epistaxis, and have never in a single case failed to arrest the bleeding by compression of the aforesaid artery, with the finger applied over its track, making firm pressure against the bone. This will arrest the bleeding in nine hundred and ninety-nine cases in a thousand. I have been called to see cases when other physicians had plugged the nostrils, and injected solutions of ferri persulphas, ice-water, etc., without benefit, and have at once arrested all hemorrhage instantly by the above simple means. Tell them to try it.

*A SECOND GASTROTOMY FOR THE REMOVAL OF A
FOREIGN BODY FROM THE ŒSOPHAGUS.*

It was the privilege of the readers of the JOURNAL, last December, to read an account of an operation, at once original and successful, by Dr. M. H. Richardson, for the removal of a foreign body from the lower end of the œsophagus, where it had resisted attempts to dislodge it from above, and was too low to be reached by an œsophagotomy. Dr. Richardson opened the stomach by an incision parallel with the border of the ribs, inserted the hand and fore-arm into the stomach, introduced two fingers into the œsophagus, and drew the foreign body—a dental plate with false teeth—into, and then out of, the stomach.

A second gastrotomy for a foreign body, this time a peach-stone, has just been published by Dr. Wm. T. Bull, of New York. The subject of the operation was a colored boy, sixteen years of age, and the operation itself differed in certain features from the prior operation of Richardson. The incision was three inches in length, from the level of the ninth costal cartilage to two inches above the umbilicus; the upper limit was determined by noting the point where percussion dullness of the liver disappeared. This incision was chosen because an incision in the median line would be nearer the œsophageal opening than one parallel with the border of the ribs, and the hand or finger, operating through it, would be less encumbered by the overhanging ribs. This incision exposed a part of the anterior wall of the stomach and its greater curvature about two inches and a-half from the pylorus. At the part chosen for the incision into the stomach, two loops of silk were placed two inches apart in a vertical line, and the incision made an inch and a-quarter between them; additional loops in the edges gave greater control over the incision. The finger, inserted into the stomach through this incision, closed the wound entirely, and was passed directly backward until the vertebral column was felt, and then upward till it entered the œsophagus, thus making the vertebræ a guide to the œsophagus. The anterior wall of the stomach, with its loops of silk, followed the silk into the cavity, and was folded on itself like the invaginated scrotum in examination of the vaginal canal. The foreign body was felt, and gentle attempts were made to extract it through the stomach. These failing, a slender bougie was passed along the finger, up the

oesophagus, and projected from the mouth; a sponge was attached by a strong silk to the lower end, and pulled through with a view to drag the peach-stone up from below. The first attempt was unsuccessful, but a second, with a larger sponge, brought the stone into the mouth, when the finger met and extracted it. A rapid recovery, without accident, followed the operation.

The noticeable features of the case, which contributed to its success, are: The small wound in the stomach, just sufficient to admit the index finger, the invagination of the anterior wall of the stomach, the control of the stomach wound by loops of thread, so it was held closed against the finger, which acted as a plug and prevented the escape of the gastric fluids, and the very moderate manipulation of the stomach itself.

Dr. Bull emphasizes the advisability, when there is doubt as to the possibility of safely extracting a foreign body by oesophagotomy, of resorting promptly to opening the stomach.—*Boston Medical and Surgical Journal*.

CARCINOMA OF THE UTERUS.

German gynecologists have been busy with the statistics of the operation for the complete removal of the uterus for carcinoma. Material is now on hand to determine if the operation is a justifiable one. The testimony is to the effect that it is. It is, without doubt, superior to any other treatment of the cancerous uterus. Up to the close of the year 1886, 811 cases have been collected, with forty-seven deaths, or 15.1 per cent. With increased experience, the mortality is gradually decreasing, and we may expect it to continue to do so. As to immediate mortality, the operation shows better results now than the removal of the breast for cancer. The patients are usually prepared for the operation with an antiseptic vaginal injection. One stroke of the knife frequently suffices to open the pouch of Douglas, and display to view the posterior fornix, after which the cutting is done cautiously, paring with the finger-nail. Warm water is kept running over the surface, and no sponges are used. The peritoneum is opened on the one side, and one finger is passed in, which frees the broad ligament from the uterus. The ligament is then, in like manner, freed in the other side, up to which time the hemorrhage is very considerable. The bladder is then freed, which is done with the forceps and the knife.

The cut borders of the vagina are then united to the peritoneum, just as was done on the other side. It seems to be of little import whether the uterus is removed through an incision made posterior to the neck, or at the side or front of it. Some turn the uterus over; others draw it down and remove it. Some leave the opening in the floor of the pelvis; others close it. It may be drained either with iodoform gauze or a tube. If easily done, the tubes are also removed. It is not the custom here in Germany, as in France and England, to use the clamping forceps to restrain the hemorrhage from the ligamenta lata. The prognosis in the total extirpation of the uterus is quite as good as in the supra-vaginal operation, and is rapidly supplanting it.

THE INFLUENCE OF TYPHOID FEVER UPON INSANITY.

"It is an ill wind that blows no one good." The appearance of typhoid fever among the patients at the State Hospital for the Insane, at Norristown, Pa., has given rise to a great deal of anxiety; but it has had a most fortunate and curious result in curing some of the patients, who contracted the fever, of the insanity. One woman, about fifty years old, who had suffered with chronic melancholia for several years, has been discharged perfectly well. Another patient, about twenty years of age, who had been in the hospital eight months with a second attack of acute mania, though subsiding somewhat at the time of the invasion, has gone home perfectly well. Another patient, a girl about eighteen years old, was beginning to recover from acute mania, when she sickened with typhoid fever. After the fever left her, she seemed quite bright, although she is now inclined to be very dull and stupid. At any rate, a decided change has been produced in the mental condition of this patient.

It is well known that the bodily conditions are frequently altered after typhoid fever; the lean may grow corpulent, and those who were previously fat, may grow lean. But it is not so generally known that disturbance of the cerebral functions are favorably affected, or that even the moral principles of an individual may undergo a decided change. After this fever, some persons have been known to develop a propensity for stealing. Dr. Crothers reports a case of a student of theology who, on recovering from typhoid, "betook himself to such a life as compelled him to pass most of his time in jail."

Dr. W. F. Waugh reported similar cases to the Pennsylvania State Medical Society in 1886. One young man, after being ill with typhoid fever for thirteen weeks, exhibited the delusion of grandeur, and developed most unnatural tastes, acting consistently the part of the wealthy youth who is sowing his wild oats. A more gratifying phase of his mental revolution was the development of a talent for the work of a solicitor, which he never exhibited before his illness.

These curious results indicate the profound influence which such a disease as typhoid fever may exert upon the human economy, and discover it in an unexpected *role* of beneficence. In such cases as we have referred to, it has proven a blessing, although a blessing very well disguised.—*Medical and Surgical Reporter*.

USES OF ANTIPYRIN AND ANTIFEBRIN.

Demieville confirms the observations of other clinicians regarding the usefulness of antipyrin in neuralgia. The dose is seven grains, three times daily. Pain disappears frequently immediately after ingestion of the drug, and, in most instances, within one-half to one hour. Sleep is also induced by the remedy. The system becomes accustomed to antipyrin only after a prolonged use, and a discontinuation of a few days suffices to re-establish the activity of the drug. Thus far, sciatica, lumbago, and a few other forms of neuralgia were treated satisfactorily with antipyrin. Dujardin-Beaumetz recommends antifebrin as an anodyne in neuralgic or rheumatic pain. He asserts that the remedy acts even in such cases of pain as are based upon an alteration or compression of nerves (neuritis optica); likewise, in pain referring to a multiple sclerosis. In epilepsy, antifebrin showed also a favorable action. The dose is twenty to thirty grains three to four times daily. Francotte found that antifebrin reduces the reflex activity, while antifebrin increases the same. Both produce tonic and clonic cramps. Hence, the two drugs should be exhibited in different nervous diseases. In tabes, antipyrin proves useful in checking the lancinating pains, though the ataxia increases during the use of the drug; this disadvantage is removed by discontinuing the remedy. In neuralgia of the head (as Faust also proved), antipyrin is by far the most effectual remedial and palliative agent. It is best given in capsules containing seven to fifteen grains each.—*Annales de la Societe Medico-Chir. de Liege*.

RESORCIN.

This drug is favorably reported in the treatment of cutaneous and gastric disorders. Dr. Edward Maclay, in *London Medical Record*, claims for it the antiseptic properties of carbolic acid, without the irritant properties of that substance. A two per cent. solution is antiseptic, and unirritating to the tissues. It seems to possess special advantages in the treatment of gastric and cutaneous disorders. Dr. Maclay reports two cases of gastric ulcer, with immediate recovery under its use. In gastric catarrh, not relieved by bismuth, soda, etc., recovery followed at once under treatment with resorcin. Intestinal catarrhs, chronic diarrhoea, etc., were in no way benefitted by resorcin, nor were the evacuations disinfected, constituting a marked contrast to the actions of naphthalin, and suggesting a special field of action for each of these two drugs: naphthalin for intestinal disorders, or wherever it is desirable to disinfect the intestinal canal, or render antiseptic its contents; resorcin for the same purpose in the stomach, and externally in sensitive tissues. Internally, Dr. Maclay employs five-grain doses of resorcin, three times a day, given in water with a little glycerine, or in chloroform water. The taste is peculiar, but slight and easily tolerated. Much larger doses have been employed, but are not advisable, thirty grains having caused febrile disturbance, and sixty grains marked toxic action, dizziness and collapse.—*Francis H. Williams, M. D., in Medical and Surgical Journal.*

THE DELETERIOUS EFFECTS OF TOBACCO ON THE THROAT AND NOSE.

DR. M. F. COOMES, of Louisville, Ky.

He considered smoking far more injurious to these parts than chewing. The smoke came into the mouth heated, and loaded with an irritating oil that would soon coat the mucous membrane, were it not washed away by the saliva. Cigarette smoking is especially injurious, because the smoke is so universally inhaled, causing pharyngitis, laryngitis, and chronic irritation in the nose, not to mention the injury it may occasion to trachea and lungs. Where the smoke is habitually expelled through the nose, we find hypertrophies, congestion, dilated vessels, and a hemorrhagic condition. The smell is impaired or destroyed. The potash salts may also have some effect in adding to

the injury. Ninety-five per cent. of smokers have something abnormal or unhealthy about the upper air-passages. In bad cases, he found chronic hyperæmia and inflammation of epiglottis with congested cords, and hacking cough to remove the tough mucus; the voice tires easily.—*Columbus Medical Journal*.

SUBLIMATE-PAPER AS A SURGICAL DRESSING.

Filtering-paper, which has been soaked in a solution of corrosive sublimate, 1 to 500, with the addition of glycerine, five per cent., and then dried, is used with excellent results as a dressing. It has been proven valuable, not only in small, superficial wounds, but also in some important operations, such as extirpation of cervical glands, amputation of fingers, and even in a case of amputation at the upper part of the thigh, in which the first dressing, after careful approximation of the edges of the wound, remained unchanged for ten days. Gedeke uses the sublimate-paper folded in from two to eight thicknesses, according to the necessities of the wound, and bandages the dressing to hold it in position.

As a result of his observations, he comes to the following conclusions:

1. That filtering-paper, thoroughly soaked in a solution of corrosive sublimate of the strength of 1 to 500, makes a good material for dressings.
 2. For a dressing, it is necessary, according to the extent of the wound, to use the paper in two to eight layers, and to complete the dressing by a dry bandage exterior.
 3. This method is pre-eminently suitable for fresh wounds.
 4. In complicated injury of the fingers, the dressing has the advantage of rendering the fingers immobile.
 5. It should not be left on longer than two or three days.
 6. In case no antiseptic dressing is ready, the sublimate-paper can be used for a short time to make a suppurating wound aseptic.—*Centralblatt für Chirurgie*.
-

ANTIDOTES TO STRYCHNINE, RESORCIN, AND PICROTOXINE.—Professor Aurep has proven experimentally that urethan possesses properties antagonistic to the convulsive drugs, strychnine, etc., and believes that urethan may be employed in cases of poisoning, by these substan-

ces. It is superior, for this purpose, to hydrate of chloral; it is less dangerous, and may be administered in large doses with perfect safety. The author concludes that, in the case of man, it is necessary to administer it in doses of four to six grains, as an antidote to the poisons above mentioned.

E. Kock states that butyl-chloral hydrate is useless as an antidote in cases of strychnine-poisoning; in picrotoxine-poisoning, it fails to overcome three times the minimum fatal dose, behaving, in this respect, like chloral-hydrate. Picrotoxine may be successfully used as an antidote to the narcotic effects of butyl-chloral hydrate and chloral-hydrate. According to A. Bockal, paraldehyde is a powerful antidote to strychnine. Ten times the fatal dose of strychnine may be safely administered to dogs that have previously received paraldehyde. Strychnine is not, however, an antidote to paraldehyde.

THE ACTION OF TOBACCO.—“Observations by Grammatschicow and Ossenkowski have led to the following conclusions: The assimilation of nitrogenous matter is lessened. Digestion is prolonged. The consumption of tobacco hastens the assimilation and elimination of potassic iodide. The influence of tobacco on the processes of nutrition and assimilation is especially noticeable in those just commencing its use.

Walitzkaja has made an examination of more than one thousand workers—men, women, and children—in tobacco, and has, in addition, undertaken a series of experiments on animals, in the laboratory of Prof. Aurep. The workmen, who are constantly exposed to an atmosphere filled with the powder of tobacco, suffered chiefly from nervous symptoms, such as: dilatation of the pupils; cardiac neuroses; exaggerated tendon, and vasomotor reflexes; trembling of the hands; dyspnoea. They are subject to headache, attacks of fainting, gastralgia, and cramps. Next to the nervous system, the respiring organs suffer most frequently. Bronchial and laryngeal catarrh and emphysema of the lungs are common. Phthisis does not appear to be frequent.

Experiments on dogs and rabbits clearly established the fact. The nervous troubles observed in the workmen, are really due to tobacco. The symptoms of poisoning are the same after injection of nicotine as after exposure to an atmosphere impregnated with tobacco; and these symptoms are identical with those observed in workmen.”—*Boston Medical and Surgical Journal*.

ON the surgical uses of the preparations of lanolin, Güterbrock uses an ointment composed of lanolin and zinc oxide, or iodoform in the proportion of ten to one (10 : 1) in cases of burns, ulcers and artificial eczema. It can be spread uniformly over a greater surface ; its consistency is almost independent of differences of temperature.—*Berliner Klin. Wochenschrift.*

ON THE SUBCUTANEOUS USE OF ERGOTINE IN DIABETES AND ALBUMINURIA. — A. Dehenne (L'Union Med.) claims to demonstrate :

1. That ergotine, or ergotinine, subcutaneously will cause the temporary and often the permanent disappearance of the glycosuria, polydipsia, polyuria, emaciation, and weakness of diabetes.
2. That these symptoms disappear in a regular order ; the polyuria and polydipsia disappear after five to eight injections ; the glycosuria lessens after the second or third injection, and disappears after the tenth or twelfth.
3. That the glycosuria reappears if the treatment be stopped too suddenly.
4. That the disappearance is permanent after six or eight weeks of treatment.
5. That the injections are perfectly harmless.
6. That by this treatment diabetics can be prepared for any surgical operation, particularly cataract.
7. The freedom of this treatment from digestive disturbances.

He injects six to ten drops, sometimes more, daily.—*Kansas City Medical Index.*

The Popular Science News, on the subject of impure ice, which has lately been much discussed in medical journals, says : Freezing is a process of crystallization, and the tendency is always to eliminate impurities from the crystals ; but the foreign matters can and do remain entangled in the mass among the intercrystalline spaces. There have been undoubted cases of typhoid fever and other diseases produced from this cause, and it is a safe rule only to use ice formed from water of assured purity. In other words, wholesome ice cannot be made from unwholesome water.

Editorial.

THE UTERINE APPENDAGES: THEIR REMOVAL BY ABDOMINAL SECTION.

Under various names, operations which in effect produce the menopause artificially, have become of late so common as to rarely claim much attention, unless there are special conditions of interest in reported cases. Nevertheless, the questions involved in this most important surgical procedure, are of sufficient moment, and have such an important bearing upon the longevity of woman withal, as to warrant still frequent discussions in journals as well as societies.

Excision of the ovaries for conditions other than cystic disease is, like its sister, the McDowell operation, essentially an American contribution to the surgical achievements of the nineteenth century; and as ovariectomy has for its most conspicuous exemplar an English surgeon, so has the palm of oöphorectomy passed from American to English hands. It is quite certain that Sir Spencer Wells and Mr. Lawson Tait have made abdominal sections a greater number of times than any other two men in the world. The influence of their work upon surgery in general, as well as upon abdominal surgery in particular, has been of an enduring character.

The history of the operation for the removal of the uterine appendages—its evolution, so to speak—is an interesting one. In 1865, Robert Battey, of Rome, Ga., conceived the idea of extirpating the normally active ovaries, to bring about the menopause in certain cases which had resisted all other means of cure. He did not perform the operation, however, until August 17, 1872. Meanwhile, Hegar at Freiburg, and Lawson Tait at Birmingham, July 27th and August 1st, respectively each, curiously enough practised the operation a few days before Battey, but unbeknown to the latter. Hegar's and Tait's cases were unsuccessful, while Battey's was successful. Both Hegar's and Tait's cases were unpublished—Battey published his in the September following its making, and defended it the next April, before the Georgia Medical Association. Battey contemplated, at this time, only the re-

The fact that there was a leper in the city then, soon reached the ears of the ubiquitous reporter, and was worked up into a sensation in short order. The Board of Health took cognizance of the matter, and demanded from Dr. Van Harlingen the address of the unfortunates, which the doctor refused to give, as involving a breach of professional honor. The Board then added the disease to the list of contagious affections, of which, under penalty, notice must be given to the authorities, and on Dr. Van Harlingen's continued refusal, fined him \$100 for violation of the law. The upshot was, that the patients voluntarily reported to the health office, and were immediately isolated at the Municipal Hospital for contagious diseases.

A number of prominent physicians of Philadelphia, feeling that the doctor had been hardly treated, united in paying his fine, and their letter rather reflects upon the action of the Board.

The popular conception of the awful danger of contagion undoubtedly derived from the sacred writings, but there is no positive evidence that the leprosy of the Bible is the disease that is now designated by that name. That true leprosy is contagious in the sense, that there is absolute danger to a community from the existence of a leper in its midst, has never been proved. In London, there is almost always at least a dozen cases coming from India and other southern colonies of the Empire. Though they are permitted perfect liberty, there is not on record a single case of the disease which had its origin from contact with the diseased individual in England. Liveing—perhaps the most eminent dermatologist in England—asserted to the writer, that he had known lepers coming to England, in the early stages of the disease, entirely recover. The Royal College of Physicians, in answer to some expressed fears of danger from the presence of the disease in so crowded a centre of population, appointed a committee to investigate, and the text of their report is as follows:

"The committee are of opinion that if there is any elements of contagion in leprosy, they are not more to be dreaded than are those in the case of syphilis, which is not commonly considered to justify segregation on the part of those affected, and that they be

these terms can never be made to fit kindly to the environments which naturally belong to the operation.

Taken all in all, therefore, the expression, "The removal of the uterine appendages by abdominal section", even though it be open to the objection of lengthiness, would seem to best convey the real idea of the operation as at present practiced, and is coming into quite general use in its literature.

The operation has now passed through the period of trial and criticism, and the verdict of the profession is that it has a field, and that its judicious employment in appropriate cases is to be approved on grounds of humanity and science, as affording the safest, surest, and speediest relief in many diseases of the uterine appendages, otherwise incurable.

THE LEPROSY SCARE.

It will be remembered that, some years ago, it was proposed to bring from the Pacific coast two persons afflicted with leprosy; the intention being to turn their misfortune into a means of making money, by the public exhibition of their affliction. Much popular alarm was caused by the announcement, and an intimation that the authorities would not permit such an exhibition, led to the abandonment of the project. It would be to the public good if all such exhibitions of personal deformities and diseases could be summarily suppressed.

The incident showed, however, how great a dread there exists, in the popular mind, of the disease, and this has been more strongly indicated by the excitement in Philadelphia, due to the presence in that city of two cases of leprosy, whereby the community was thrown into a state of terror.

It appears that, about a year ago, a woman and her daughter came to this country from Brazil, locating in Philadelphia. The woman consulted Dr. Van Harlingen concerning a "Skin Disease", which the doctor at once recognized as a case of leprosy. A few months ago, he read a paper at the County Medical Society, in which these cases were described, and one patient was shown to the members.

Sisters of Charity. In '81 and '82, he held the office of Post-mortem Examiner, and for several years was the physician to the Buffalo Orphan Asylum, and also received the appointment of Lecturer on the Diseases of Children at the Buffalo Medical College.

He took an active interest in the various medical societies of the city, and was a valued member of the Buffalo Medical Club.

Of his excellences as a physician and surgeon, and as a man, the members of the profession have borne testimony in the expressions of both old and young at the largely-attended meeting of the Erie County Society.

Of his standing in the community, the eulogies which have appeared in the daily papers, illustrate how highly he was esteemed as an able physician and a good man: indeed, few physicians of his age have acquired so extensive a practice, and few have had so many warm friends.

In the full vigor of a splendid manhood, he was suddenly cut off after about one week's illness; his death occurring on the sixth of December, the fatal affection being (probably) malignant endocarditis. It is to be regretted that a post-mortem examination was not permitted.

Book Reviews.

Hamilton's Medical Jurisprudence. A Manual of Medical Jurisprudence, with special reference to Diseases and Injuries of the Nervous System. By ALLAN McLANE HAMILTON, M. D., one of the Consulting Physicians to the Insane Asylums of New York City, etc. Second edition; revised. New York: E. B. Treat, Publisher, 771 Broadway.

This is a practical work, doing away with those long and tiresome details which works on this subject so frequently give; yet all necessary details are given—plain, clear and concise. It is very fully illustrated with cases drawn largely from *American* sources, and, hence, better calculated to meet the wants of *American* physicians and legal advisers—a feature

that is not always to be found in similar treatises. The leading chapters embrace Insanity in its Medico-legal Relations; Hysteroid Condition and Feigned Disease; Epilepsy; Alcoholism; Suicide; Cranial Injuries and Spinal Injuries. The first chapter defines Insanity, its general indications, classifications and hereditary influence—including Post-Mortem Examinations of the Insane (with plates of the typical and a typical brain). Under the Legal Relations of Insanity, we have Legal Tests—The Guiteau Case—Physical Tests—Duties of Medical Experts—Tricks of Counsel—Illusions, Hallucinations and Delusions—Reasoning Mania—Contracts made by the Insane—Testamentary Capacity—Old Age and Dementia—Undue Influence—Medico Legal Relations of Aphasia—Marriage and Insanity—Insurance Frauds—Responsibility of Deaf and Dumb—Criminal Responsibility—Responsibility in Relation to Imbecility—English Test of Responsibility; American Decisions on it—The Test of Right and Wrong—Impulsive Insanity—Commitment of Lunatics, and State Laws Regulating it—Concealed and Feigned Insanity, etc. The chapters on Cranial and Spinal Injuries are particularly valuable, for the numerous decisions cited from our courts in connection with suits for damages from railroad collisions, etc.

Handbook of Treatment—Arranged as an Alphabetical Index of Diseases, to Facilitate Reference, and containing nearly One Thousand Formulæ. By WILLIAM AITKEN, M. D., Edinburgh, F. R. S., Professor of Pathology in the Army Medical School; Examiner in Medicine for the Military Medical Services of the Queen; Fellow of the Sanitary Institute of Great Britain; Corresponding Member of the Royal Imperial Society of Physicians of Vienna; and of the Society of Medicine and Natural History of Dresden, etc. Edited, with Notes and Additions, by A. D. Rockwell, A. M., M. D., Late Electro Therapist to the New York State Woman's Hospital. E. B. Treat, publisher, 771 Broadway, New York. Price, \$2.75.

There is, perhaps, no more striking characteristic of the medical practitioner of to-day, and none better illustrating the pervading spirit of the age, than the universally-observed tendency among medical men to shun (in medical literature) the unrealities of theoretical discussion, and to appropriate with avidity only facts which they can instantly transform into working force. A

book which is at once concise and comprehensive, arranged so that the practitioner, given a disease to treat, may have before him in a nutshell the latest treatment recommended by the best authorities; and a book which is, above all else, *a book of TREATMENT*, is here offered to the profession. It is composed of the chapters on *Treatment* compiled from the seventh (latest) edition of Dr. Aitken's classical work on the "Science and Practice of Medicine," which chapters have been revised and rearranged by Dr. Aitken, so as to make them more available for reference. The work not only embraces the experience of its distinguished author, but also that of many widely-known authorities.

A Practical Treatise on Materia Medica and Therapeutics. By ROBERTS BARTHOLOW, M. A., M. D., LL. D., Professor Materia Medica and General Therapeutics Jefferson Medical College. Sixth edition; revised and enlarged. New York: D. Appleton & Co. 1887.

Bartholow's "Materia Medica" needs no praise. It is one of the necessities in every physician's library. The present edition contains a good deal of new matter. Most of the new remedies which have been proved to be of value, have been given a place, but he is careful to weigh the value of these new agents, of which he says: "Some possess the virtues assigned them—others seem hardly to justify their appearance in the *role* of remedy—and not a few, probably, are worthless for any purpose. The earliest announcements are not unfrequently given forth by medical *quidnuncs*, who are more enthusiastic than logical, more sensational than exact, and more concerned to advertise their own doings than to give expression to faithful observations." After a review of the results obtained by Bergeon's treatment of phthisis by gas enemata, he concludes: "There appears to be a growing conviction that those phthysical subjects who have experienced much benefit from the treatment, owed this result to the influences so strongly affecting the imagination of both practitioner and patient."



VOL. XXVII.

FEBRUARY, 1888.

No. 7

Original Communications.

TREATMENT OF CHRONIC STOMACH TROUBLES BY IRRIGATION.

By HERMAN E. HAYD, M. D., M.R.C.S., Eng., Buffalo, N. Y.

There are few affections which render life more miserable than chronic dyspepsia, associated, as it is, with so many varied and troublesome phenomena. Moreover, no class of diseases for which so many different remedies have been given, including acids, alkalies, bitter infusions, digestive agents, astringents, tonics, and what not. Nor can it be said that any one or all of these agents have given anything but temporary relief. Therefore, the greatest patience on the part of the physician, and no less forbearance from the patient, is necessary in treating these very troublesome diseases.

During the last decade, a most important as well as satisfactory method of treating these affections has been largely used in Germany, viz., irrigation of the stomach; and, by means of it, the most inveterate cases have been permanently cured. For the past three or four years, I have resorted to irrigation very frequently, and have invariably cured the most obstinate forms of chronic dyspepsia, and have relieved materially many of my patients by three or four washings, when they would not submit to a continuance of the treatment.

Unfortunately, this procedure requires much moral courage. Although not accompanied by any pain, yet it is a very disagreeable operation, but becomes less objectionable after three or four seances. At first, the gagging and retching are considerable, and sometimes slight capillary hemorrhages occur, which are apt to alarm very sensitive people. Add to this, much depression, and even shock, during the first operations; and we will not be surprised to see how reluctantly some submit to this treatment. Yet, as a general rule, the fear and dread is largely imagination; so that, after the first treatment, the patient swallows the tube without much trouble, and submits to the operations very willingly.

The instrument which I have used is a very simple affair, and may be obtained for a few dollars. It consists of an œsophageal tube, about one inch in circumference, and about forty inches in length. To its free end is attached a piece of rubber tubing, about four feet in length, and to it an ordinary-sized funnel.

The patient is seated upon a chair, with the head well thrown backwards. The instrument is dipped into warm water, and thoroughly softened, and then annointed with some unctuous material, preferably glycerine. The index finger of the left hand is placed firmly upon the base of the tongue, and the instrument—the point of which is slightly bent—is held loosely in the right hand, and passed into the pharynx, and directed along its posterior wall. When the opening into the œsophagus is reached, the admission of the instrument is obstructed from spasm. The patient is now directed to swallow; and these efforts, together with slight pressure on the tube, forces it into the œsophagus, and then its onward course is easily accomplished.

Much can be done to obviate the difficulties attending the first operations, by painting the pharynx and soft palate with a four per cent. solution of cocaine. This renders the parts less susceptible to irritation and reflex action; consequently, the gagging and discomfort is much lessened.

I prefer to have the patient see me in the morning, about an hour and a-half or two hours after having taken a cup of beef

tea or warm milk; in fact, try to have the stomach empty and free of all undigested food, as these lumps are apt to get into the eye of the tube, and give rise to no end of trouble. About two gallons of water is used for each operation, and the temperature of it is about 106° at first, and is gradually increased to 120° F. The water is slowly poured into the funnel, well elevated above the patient's head, and just as soon as feelings of discomfort and distension are complained of, the tube is quickly depressed, and by siphonage the fluid runs out. The ablution is continued until the escape fluid is clear and sweet. At first, the stomach will only tolerate about a quart, but, after a few washings, much more fluid can be introduced. This is a very important feature, because, by thoroughly distending the stomach—not to over-distension—the organ is rid of all offending and irritating mucus, and circulation and absorption is made more active. It is well to add some alkali, say sodæ bicarb., ʒj., and sodæ bibor., grs. xx., to each quart of water. The former renders the mucus less tenacious, while the latter is slightly astringent, stimulant, and antiseptic. Again, boracic acid can be used with advantage. If gastralgia or enteralgia have been distressing symptoms, a-half a drachm of chloroform, or one drachm of spts. ether. chlor., is a very valuable addition to this solution.

CASE I.—Mrs. D., *æt.* twenty-seven, consulted me on August 18, 1885. Has two children; youngest, eighteen months old. Always enjoyed good health, was vigorous, cheerful and light-hearted; weighed 176 pounds.

About fifteen months ago, she went to a dinner-party, and ate very heartily of many rich dishes. That night, she was seized with a violent attack of acute indigestion. Since that time, has complained of more or less uneasiness and distress in the pit of the stomach, and particularly after taking food. Flatulence, drowsiness, mental depression, often approaching melancholia, severe headache, especially over the eyebrows and through the temples, obstinate constipation, etc., etc.; heart-burn, for which she had taken enormous quantities of bicarbonate of soda;

nausea, and even vomiting, at the sight of food. She lost flesh rapidly, the various functions of the body were disturbed and irregular, and, finally, she became a confirmed invalid. I was called to the Tiff House one night, and met the patient for the first time. She was on her way home to Indiana, after having been in New York for some weeks under the care of a specialist. She was a pale, anæmic brunette, with large frame and big bones, and weighed one hundred and twenty-six pounds. She had been vomiting for several hours, and was quite exhausted. The vomit contained much thick, stringy mucus. The tongue was large, swollen, slightly coated with a greyish fur, and traversed laterally and horizontally with deep fissures and cracks. The papillæ about the tip and edges were prominent, red, and angry-looking. Bowels constipated; pulse ninety-six, soft, regular and compressible. I prescribed the usual remedies: mustard plasters to the pit of the stomach, broken pieces of ice, small doses of calomel, and rest. In a few days, I advised irrigation, which she hesitatingly submitted to; but finally consented, since all other remedies ever employed did her little or no good. I washed the stomach three times a week, and prescribed a powder, sodæ bicarb., grs. v., bismuth trisnit., grs. ii., hydrarg. chlor. mitis, grs. ii., *ter in die ante cibum*, also peptonized milk, broths, and other easily-digested and assimilable foods. She was under my care for eight weeks, and, during this period, I washed the stomach eighteen times. The improvement in her general condition was very marked from the first operation. She had less distress with her food, little or no flatulence, and gained rapidly in flesh and strength, which improvement continued uninterruptedly. In these eight weeks, she gained thirteen pounds. I saw her again last October, when she weighed 158 pounds, and *felt very well*. She still exercises care with her diet.

CASE II.—Mrs. W., *æt.* fifty-two; mother of four children; youngest, nineteen. Diagnosis—hysterical œsophagismus, associated with chronic dyspepsia. Patient has lost much flesh, is nervous and excitable, and at times exceedingly irritable.

For a number of years, has complained of various dyspeptic symptoms, but that which distressed her most was flatulence, accompanied with water-brash. After a time, nausea, and then vomiting upon the slightest ingestion of food. For the past six months, the emesis has not been associated with any depression. The food was simply regurgitated into the mouth in a semi-digested state, and spit out. She says that it is impossible to swallow any solid food—it sticks in her throat. For months, she had lived upon milk, broths, soups and liquid food of various kinds. Upon examination with a flexible bougie, a definite stricture was felt about the middle third of the œsophagus, which gentle pressure on the instrument, and a little time, overcame. The stomach was much dilated, and when a pint of water was poured into it, its lower border could be traced two inches and a-half below the umbilicus.

Lavage was advised, and the first washing brought away a surprising amount of an exceedingly fetid fluid, which contained much thick, stringy mucus. The operation was repeated six times, with considerable benefit. She left the city unexpectedly, so I was not enabled to follow up the treatment. Yet I had every hope of curing her. Moreover, she felt assured of her improvement, and intended to have her family doctor continue the treatment.

CASE III.—Miss G., *act.* twenty-five. Diagnosis—gastric ulcer. For three years, had suffered much from pain in the pit of the stomach, and especially upon taking food. About a year ago, this pain was very severe, and was often accompanied by vomiting. In the ejecta, she frequently saw blood. Is pale, anæmic, and complains of much tenderness upon palpation in the epigastrium.

As she had been under the care of various physicians, and had taken nearly every drug in the drug-shop, as she said, I advised her to submit to irrigation of the stomach. She did so without much persuasion, although at first I was reticent in using this means, lest I might perforate the stomach. But after having read an article in the *Medical Record* by Dr. Kinnicutt,

who had treated many cases with great benefit, I concluded to make the trial with caution. At first, I only introduced a pint of water, and withdrew it, then repeated the procedure four times, and each time used about the same amount of water. To the last pint I added a-half a drachm of bismuth trisnit., well rubbed up with glycerine. The return fluid was slightly stained with blood. She called again in three days, and reported that she had suffered less pain than for months past. I repeated the washings eleven times, extending over a period of eleven weeks. She gained flesh and strength, muscles became firm and well-nourished, appetite returned, and she suffered little or no pain. Patient is still under observation.

CASE IV.—Jas. S., *att.* twenty-eight; engineer. Diagnosis—chronic dyspepsia; principal and most annoying symptom, intense vertigo; tongue small and contracted, very red, irritable, and angry-looking, and traversed by deep, irregular fissures. Had lost flesh and strength, and was compelled to give up his job, not so much from physical weakness, but on account of the awful responsibility of his position, as these attacks of dizziness often came on while in the engine, when he was forced to yield his position to his fireman.

The first washing brought away a brownish-yellow, foul-smelling fluid, abundantly mixed with mucus and tinged with blood. Upon each subsequent seance, the odor was less marked, and the color of the return fluid clearer, and mixed with less mucus. I washed the stomach twenty-four times, extending over a period of thirteen weeks. During this time, he gained twenty-two pounds. His nervous symptoms and vertigo entirely disappeared. The last treatment I gave him was in April, 1887, and since that time I have seen him frequently, but never had occasion to prescribe for him.

In this paper, I have purposely cited cases in whom different dyspeptic symptoms were especially distressing and annoying. I might say that the after-treatment, or, at least, the medical treatment, during the period of irrigation was practically the same. A carefully-regulated diet, plenty of open-air exercise, and

occasionally a dose of pil. col. co., or a small dose of calomel, to relieve the obstinate constipation seen in most of these cases.

Much more could be written upon this subject, and other cases recorded, but it would only be to reiterate the same success, when the treatment was honestly carried out, as resulted in the four reported cases. Moreover, it is surprising to see the unanimity of feeling, and to read the gratifying reports in nearly every medical journal, of similar successes, by every observer who has given this method a fair trial. Some have used it with benefit in the treatment of cholera infantum, for the pains of cancer, for ulcerations, acute or chronic, for extreme dilatation of the stomach, with atrophy or hypertrophy of its walls—in fact, for every known stomach trouble.

No. 78 Niagara street.

*TUBERCULOSIS OF THE NOSE, MOUTH AND PHARYNX.**

By FRANK HAMILTON POTTER, M. D.,

Lecturer on Laryngology, Medical Department, Niagara University.

The following notes were made for my own use. Their purpose was to have, in a connected form, an account of the work accomplished in the study of the tuberculous processes, as seen in the nose, mouth and pharynx, especially with reference to their diagnosis and treatment. Particular attention is paid to what has been done on this subject during the last year. After they were well under way, it occurred to me that if they could be joined together so as to be presentable, and read before this club, it would be the means of introducing an important subject for discussion, and one worth the most serious consideration. There was also the hope that much of value would be gained through the added experience of others who perchance had paid some attention to the subject.

We will first consider the manifestations of tuberculosis as seen in the nasal passages. It is only recently that this part of

* Read before the Physicians' Club, December 23, 1887.

the subject has received any attention whatever. It was thought that tuberculosis did not attack the nasal passages; and Fraenkel, but a few years ago, in volume iv. of Ziemssen's *Cyclopedia*, in considering ulcerations of the nasal mucous membrane, remarks that "Tubercular (phthisical) ulcers of the nose seem to be among the greatest rarities. I, myself, have never seen anything like them, and find only one allusion to tuberculosis of the nose in literature." And he quotes Willigk as stating that in the Institute of Pathological Anatomy, at Prague, tuberculosis of the nasal septum was only encountered once in 476 tubercular corpses. Since this was written, it has been shown that tubercular nasal disease is not so rare as Fraenkel supposed. Cases have been reported showing various forms of the disease by Sokolowski, by Volkmann, by Koenig and Riedel, by Clutter, by Schäffer, and Nasse, and by Cartaz. From these observers, it appears that the disease occurs here under two forms: in the first as an ulceration, and in the second as a neoplasm. Both forms may be seen in the same case and at the same time. "The ulcer has a diameter of one to two centimetres, and a form more or less rounded. The situation is usually upon the septum, a little distant from the nasal meatus. The base of the ulcer is a pale reddish gray, and covered with muco-pus; caseous masses are seen embedded on certain of its aufractuositities, or fine grey granulations are seen in relief. The edges are sometimes projecting, sometimes forming, sometimes a light grey ring, sometimes sharply cut and toothed with small excavations. There is little pain, or interference with nasal respiration."

In the second form, the neoplasm appears usually as a tumor. It varies in size from a small pea to a fairly large nut. In one case, it developed as a large fibroma of the septum. In all the reports I have seen, the tumor was found upon the septum, though Cartaz speaks as if it could be found in other places. Associated with these tumors, there is usually coryza, and nasal respiration is interfered with, especially if the growths are large and the coryza severe. They bleed easily, and are harder in the center than upon the outer portions. The diagnosis before removal is diffi-

cult, unless there are other signs of tuberculosis present, though a hereditary predisposition to the disease should put one on guard about them. Tubercle bacilli are found in them, but they are not abundant. After removal, there is an inclination to recurrence and to ulceration, which may involve the bony parts and cause perforation of the septum. It is proper to notice that Dr. Bresgen, of Frankfort, considers the tumors with the above characteristics as lupus, and not tuberculosis. This seems to be an unnecessary refinement, and tends to confuse, for lupus itself is a tuberculous process, and the treatment of the former must be based upon the recognition of its pathological relationship to the latter.

The local treatment of these conditions would naturally follow here, but, in order to prevent repetition, we will postpone its consideration to the end of the paper. In the pharynx and mouth, we find that the tubercular processes appear more frequently than in the nose, but, on the other hand, less frequently than in the larynx and lungs. It seems that the deeper we descend in the air passages, the more often is this dreadful disease encountered. Seen in the mouth or pharynx, the local manifestations take the form of ulcers generally, but Ariza reports a granular condition also; and Volkmann says that small tumors, showing a tendency to soften in the centers, may be found. The latter manifestations are rare. The most complete description of the ulcers is that of Mr. Henry T. Butlin, in his work "*On the Diseases of the Tongue.*" As it applies equally well to the ulcers found in the other parts of the mouth and pharynx, I quote it entire: "A completely-developed tuberculous ulcer, not too broken down and sloughy, presents most of the following characters: The surface is uneven, pale and rather flabby, granulated, or often covered with yellowish-grey, viscid or coagulated mucus; the edges are sometimes sharp-cut, sometimes beveled, seldom elevated, or everted, or undermined; not usually very red, but often redder than the surrounding tongue; there is very little surrounding induration: indeed, there may be none; the adjacent portions of the tongue are generally a little swollen,

sometimes decidedly swollen and sodden; the outline of the ulcer has no characteristic shape, but the borders are often sinuous, and the shape is not unusually oval, or ovoid, or elongated. In the immediate neighborhood of the ulcer, and perhaps extending for some distance beyond it, are sometimes observed tiny yellowish-grey points, or patches, or elevations, or, in the place of these, minute ulcers, which in time increase in size. The depth of the ulcer varies much: in the earlier stages it is superficial, but, as the disease advances, it may eat deeply into the substance of the tongue, and, eating more deeply at one part than another, may present different depths at different parts. It is almost invariably painful in the latter stages, and there is almost always salivation. In this description, some resemblance may be discovered to the tuberculous ulcers of other parts of the body; in the pale and flabby granulations, the sharp cut or beveled edges, the absence of surrounding inflammation and induration."

It is next important to know that these ulcers may appear in any part of the mouth or pharynx, but there are some favorable situations where they are found with greater frequency. According to the investigations of Dr. Delavan, these situations are as follows, and in the order named: Tongue, pharynx, gums, velum palati, tonsils and cheeks; nearly one-half appearing on the tongue. In this list, the lips are not mentioned, and it is, therefore, proper to say that Volkmann and Hausemann report such cases, and a most instructive example has recently been reported in a Vienna medical journal. This case will be considered more at length under the head of the infectiousness of these ulcers.

It used to be held that these local lesions were always a sign of the constitutional disease, but one can no longer believe this. There are many well-authenticated cases in which the local trouble preceded the general disease, and others where the local was the only manifestation present, and which disappeared after a time under appropriate treatment. In the seven cases of buccal tuberculosis reported by Dr. Delavan in 1886, three were of

primary; and in the twenty-four cases where the disease was located on the tongue, referred to by him in the same paper, nine were primary. We can thus see how important this subject is, and how carefully these cases should be considered. Especially is this so, as the primary lesion is often—as we shall see further on—susceptible of successful treatment.

Tuberculosis of these regions, as of other regions, may be either acute or chronic; and the acute form, contrary to expectation, need not necessarily lead to a fatal result. As the description of the lesions given above apply rather to the chronic variety, we will give a few words to a case of acute tubercular pharyngitis reported by Ariza. The patient was a physician, delicate, aphonic, and suffering from the greatest odynphagia. Several small red outgrowths, springing from an ulcerated base, were located on the anterior pillars of the fauces, while in the pharynx were two or three whitish granules of the size of a pin's head, and another on the base of the uvula. None of these granulations had the characteristic yellow color. The patient had experienced three attacks of sore throat within a few months, but described himself as being perfectly well since the last. Tubercle-bacilli, of recent origin, were abundant. The patient recovered under appropriate treatment. The points of interest in regard to these cases, as suggested by the author, are (1) that they are rare; (2) that the appearance of the lesions in different localities may not always correspond in point of time to the classical descriptions that have been given; and (3) that they are curable.

Another interesting point concerning these lesions is, whether or not they are contagious—that is, whether tuberculosis can be transmitted through them by actual contact. In the light of modern pathology, there does not seem any good reason to doubt that the disease can be transmitted in this way. We must consider that tuberculosis is a bacillary disease, and that both its local and general manifestations are due to the growth and development of these bacilli. It is certainly conceivable that the bacilli from an ulcer could be transmitted and find lodgment on any other abraded mucous surface coming in contact with it.

In this way, we could have auto-infection, or the transmission of the disease from one individual to another.

A case reported in the *Wiener Med. Bl.*, November 8, 1886, may be cited as confirmatory of this position: A man suffered from tuberculosis of the lungs, and, as usual, succumbed ultimately to this affection. A tubercular ulcer on his gum proved the medium of propagation of the affection from husband to wife. A few years after the man's death, the widow noted the appearance of an ulcer on her lips, which proved to be of a tuberculous nature. Direct infection through kissing was, in this instance, the evident source of this ulcer. After all therapeutic interferences (including cauterization with lactic acid) had proven useless, the ulcer was cauterized with the Pacquelin cautery, and disappeared. * It is, therefore, most important that any ulcer seen anywhere in these regions should be carefully diagnosed. The general description of these tubercular ulcers has been given above, and, if this be carefully considered, much will be done towards a correct diagnosis. Especially if there is present any evidence of general tuberculosis, the nature of these ulcers can be arrived at with great certainty. The only sure proof, however, is the finding of the bacillus tuberculosis in the ulcer or its discharges. For this purpose, the ulcer should be scraped, and the scrapings given to a competent pathologist for investigation. If the bacillus is found, all doubt as to the nature of the lesion is cleared up at once.

The possibilities of a diagnostic error are associated with the diseases, carcinoma and syphilis, as they are seen in these regions. In this regard, Hausemann remarks that it matters little to the patient whether the extirpated growth is of a carcinomatous or of a lupus, tubercular nature, but, if syphilitic, perverted therapeutics will probably make mischief. I think we may take the liberty, in passing, to doubt the first half of this statement, especially in view of the successes reported during the last year in the treatment of local tuberculosis.

Before considering the treatment of these conditions, one more point of great interest should be mentioned, viz., the

* Abstract of *Therapeutic Gazette*, May, 1886.

extreme youth of some of the subjects. Thus Laurent reports the case of tubercular disease of the tongue in a child, eleven years of age; Delavan, in the report already referred to, mentions a case of primary tubercular ulcer of the cheek in a child, aged six; and Clutton records and illustrates a unique case of tubercular ulceration of the hard and soft palate and larynx in a girl, aged fifteen, in which partial healing took place. *

The local treatment—which is alone considered in this paper—naturally divides itself into measures that are medical or surgical. The medical measures consist, in the first place, in keeping the parts clean, and then in applying directly to the diseased tissue those agents found to have a beneficial effect on tuberculous processes. The cleaning must be done carefully, so that all discharges are removed. This can be done by dissolving them in an alkaline solution, and wiping them away with absorbent cotton. If they resist removal by these simple means, forcible measures should be used, as scraping with the curette, etc. Our remedies are limited, consisting of cocaine, corrosive sublimate, iodoform, iodol, lactic acid and menthol.

The use of cocaine is familiar to all. Corrosive sublimate is a dangerous remedy to use, though it is effective. Iodoform is objectionable on account of its disagreeable odor. Iodol is practically without odor or taste. It contains seven per cent. of iodine, and parts with it much more rapidly than iodoform. It can be used freely, with but little danger of toxic effects. "It is antiseptic and anæsthetic, a promoter of granulation and healing, arrests suppuration, and deodorizes foul secretions." †

Tuberculous ulcers have been reported to heal perfectly under daily applications of iodol by Lublinski, Wolfeuden and others. On the whole, it is one of our most efficient agents. Lactic acid has proved disappointing. It is painful to apply even under cocaine. It acts best where there is a good deal of induration surrounding the lesion. It is applied by saturating a piece of absorbent cotton with it, and pressing it against the part.

* *Journal of Laryngology, etc.*, March, 1887: page 92.

† *Journal of Laryngology*, July, 1887.

A good deal can be said in favor of menthol. It is slightly analgesic, and agreeable in its application. It is highly destructive of the bacillus tuberculosis, according to the testimony of Koch, Sormain and Bagnatelli. As far as known, it produces no toxic symptoms, and can, therefore, be used freely. It is very soluble in alcohol and the various oils. I have used it dissolved in the oleum petrolina in the strength of five to thirty per cent. As I have only used it in cases of laryngeal and pulmonary tuberculosis, a report of my observations would be beyond the scope of this paper. It may not be improper, however, to say that my experience with its use confirms the opinions of Rosenberg, Hyndman and others; that it possesses a most favorable influence over the tubercular lesions. It certainly deserves an extended trial.

There are many localities, as, for instance, the tongue, where the medical measures mentioned above will fail, because the applications are immediately washed away by the natural secretions of the parts, thus preventing any prolonged contact of the medicine with the diseased tissue. In these cases, we must resort to surgical measures. These consist in scraping the ulcer with the sharp curette, in excising it with the knife or the pacquelin, or the galvano-cautery, and then in promoting healing by the means detailed above. Excision seems to be followed by the best results, for the reason that the ulcers are often irregular, and it is impossible to remove all the diseased tissue by scraping. When you have to deal with a neoplasm that is large, it can be removed with the snare, and its base cauterized with chromic acid or the galvano-cautery; or, if the growth is small, it can be removed by the galvano-cautery. The details of these operations need not be given here. It is more a question of applying the surgical relief to locations that are often very difficult to reach than one involving any principle of operation not already well understood.

In conclusion, I trust enough has been said to quicken the interest in these local manifestations of tuberculosis, so that, when met, a proper diagnosis may be made and a proper treatment begun.

*EXPERIMENTS BEARING ON THE INFLICTION OF
THE DEATH PENALTY BY ELECTRICITY.**

By GEORGE E. FELL, M. D., F. R. M. S.,

Professor of Physiology and Microscopy, Medical Department of Niagara University, Buffalo, N. Y.

In the month of July, 1887, there was conducted a series of experiments calculated to throw considerable light upon the value of electricity in killing dogs. The authorities of the city of Buffalo, N. Y., had determined to rid the city of the numerous curs roaming the streets. To reduce their sufferings to a minimum, the agent of the Society for the Prevention of Cruelty to Animals recommended that electricity be applied as the death-dealing agent. The experiments were conducted at the improvised dog-pound, prepared at old Police Headquarters. The canines were quartered in one room; adjoining this was an entry which communicated with a third room, in which the electrical apparatus was located.

THE ELECTRICAL APPARATUS.

This consisted of a common pine box, lined with zinc, and connected with one pole of the electric-light current for that portion of the city. When in use, the box was partially filled with water. Connected with the electric-light wire, representing the other pole, was an ordinary dog-muzzle, supplied with an iron or copper bit, which was inserted into the mouth of the canine.

The animal being placed in the box, the switch making the circuit was turned, causing the apparent instantaneous death of the animal. Only in exceptional cases were any movements noted after the current was made.

The results obtained by experiments conducted in this manner leaves the subject just where public opinion would place it, viz., that electricity will kill quickly. However, to ascertain how quickly and thoroughly, requires further demonstration.

* Extract from a report of the Commission appointed by the Governor of New York to investigate and report on the most humane and practical method of carrying into effect the sentence of death in capital cases.

The heart may rightfully be considered the center of function, and, in the execution of criminals by the legalized hanging process, is always examined to ascertain when death ensues. In favorable cases, it is known that the heart may beat from six to ten minutes, and in some cases it has been known to beat from fifteen to thirty minutes before death.

For the purpose of ascertaining the effect of the electric-light current on the action of the heart, the operation of opening the thorax of an animal under forced respiration was made. With this operation satisfactorily performed, the heart and lungs may be observed in action, viz., the heart beating and the lungs contracting and expanding as in life.

While the operation is not new to physiologists, still the effect upon the movements of the heart, by the passage of an electrical current which might be applied in the execution of criminals, I do not believe, has been frequently noted, or the operation often performed. That the ordinary electric-light current used in these experiments is sufficient to cause instantaneous death of a human being, is inferred from the many accidental deaths produced by such means. To witness the effect produced upon the heart in action, is a demonstration which cannot be questioned, and offers a positive answer to what may have been inferred, and has already amounted to, a foregone conclusion.

To those favoring electricity as the proper agent in the execution of criminals, a demonstration of this character serves to make them more positive, and less liable to be influenced by those whose investigations have been only superficial.

Those opposed to it from the standpoint of uncertainty of action, it leaves without a foundation upon which to base their opinion. Prior to these experiments, I held the view that electricity might prove the best agent for executing criminals; after they were made, I enthusiastically supported it as the only agent which this age had any right to use for this purpose.

But to refer to the experiments: A fair-sized dog was placed under the influence of chloroform; an incision was made in the trachea, in which a tube, connecting with the foot-bellows, and

supplied with suitable valve for respiratory purposes, was attached. Repirations were then kept up by these artificial means. The chest walls (thorax) were then removed, so that the heart and lungs were exposed to view; the dog was then placed in the zinc-lined box, the muzzle put on, and the forced respiration kept up until just before the current was made. The heart was beating as in life, but, the instant the circuit was made, it ceased its action, and became a mere mass of quivering flesh; not the least resemblance to a rythmical movement was observed after the current was made. Many citizens present at the operation can testify to the above; in fact, the demonstration as to suddenness of stoppage of the heart exceeded all anticipation. The interference with all function was electrically instantaneous; death ensued from electrical shock; the ordinary conditions of dying were absent. Nothing could be more sudden.

This first experiment, although eminently satisfactory in its results, was made under conditions the most unsatisfactory. The room was full of men hurrying to and fro, the dogs were being led to their fate, and no suitable place was provided to operate. This, and observations connected with another series of investigations, led to another demonstration, which was made under more favorable conditions, at the electric-light works, on Wilkeson street. This operation was conducted with greater care; instead of the muzzle with the bit attached, to make one pole of the circuit, a piece of wire line was placed in the mouth of the dog, and wound around the nose. The zinc box was used as before; chloroform narcosis was produced as before, and the thoracic walls removed. The heart was beating rythmically; on making the circuit, it instantly ceased to beat. The current was quickly turned of, and forced respirations kept up, with the view of bringing the heart again into action; this was entirely unsuccessful. This result demonstrates that if the current is sufficiently powerful, attempts at resuscitation in the case of a criminal executed by electricity would fail.

In this second experiment, it was also noticed that an attempt to respire was made by the animal after the current was made.

This, undoubtedly, indicated that the respiratory center in the brain (medulla) had not completely lost its susceptibility to impressions, and that, through the want of oxygen in the blood and center noted, the effort to breathe was formulated. This has an important bearing upon the apparatus to be used in executions, inasmuch that it indicates that the poles should be arranged to pass the current through the center of function in the brain. Upon physiological grounds, also, this is indicated.

Even without this refinement of precision in the apparatus, as has been shown in this experiment, where the current was not passed directly through the functional brain centers, the sudden stoppage of the heart would indicate that electricity offers the most rapid agent in producing death, that we have at our command. The mere estimates of the difference in the speed of the electric as compared with the nervous current, would further indicate that our senses could not interpret or apprehend the passage, or that death, produced by such means, would be absolutely painless to the culprit.

From observations which are generally accepted, it may be stated that nervous force travels at a rate of from one to two hundred feet per second, while the electric current passes at a rate not less than two hundred thousand feet per second, or about one thousand times as rapid.

From these observations, the following deductions may be drawn :

First—That death, produced by a sufficiently powerful electric current, is the most rapid and humane of that produced by any agent at our command.

Second—That resuscitation after the passage of such a current through the body and functional centers of the brain, is impossible.

Third—That the apparatus to be used should be arranged to permit the current to pass through the centers of function and intelligence in the brain.

Correspondence.

PERSONAL NOMENCLATURE.

Editor Buffalo Medical and Surgical Journal:

In your editorial, in the January issue of your excellent journal, you have, it seems to me, fallen into confusion—a confusion shared by nine out of every ten writers on these subjects—as to what is really meant by the “Battey operation,” the “Hegar-Tait operation,” and the “Tait operation.” Whether or not personal nomenclature is desirable, is not the question; but if such nomenclature is to be used at all, it should be used correctly.

In the article on “Nomenclature Personal,” in *Wood's Reference Handbook of the Medical Sciences*, occur definitions of these several operations. As the writer of that article, I may say that these definitions cost me more correspondence than all the other five hundred put together. The definitions of Battey's and Tait's operations are quoted verbatim from letters received from each operator.

“*Battey's Operation*—‘The complete extirpation of both ovaries, while yet in a state of functional activity, for the effectual remedy of cases of disease otherwise incurable.’

“*Hegar's Operation*—The same as Battey's operation.

“*Hegar-Tait Operation*—A misnomer of Tait's operation.

“*Tait's Operation*—‘Removal of the uterine appendages for physical disease other than cystoma; as the removal of the ovaries and tubes for uterine myoma; the removal of a tube for pyosalpinx, or other disease; or the removal of both ovaries and tubes for chronic inflammatory disease and adhesions.’”

The object of Battey's operation is to bring about the menopause, and thus cure diseases that would be cured by the natural arrival of that period, and, hence, it has been resorted to many times for the cure of various hysterical affections. Tait dis-

tinctly disapproves of the operation, as employed for this purpose : there must be *actual physical disease*.

Very respectfully, J. F. BALDWIN, M. D.

COLUMBUS, O., January 18, 1888.

[COMMENT.—We see no occasion to dread the charge of confusion—there has been “confusion worse confounded” about many questions in medicine, until the truth was finally evolved, it may be. All we were endeavoring to show in the portion of our editorial referred to was, that the operations advocated by various operators, and which had taken their names, began with Battey’s operation ; that this had been left by itself in the march of events ; and that it was better to drop all individual nomenclature, which, in fact, is practically being done. We did not intend to go into the pathology of the various diseases for which these operations have been proposed, nor to discuss any technical question in detail. Perhaps, at a future time, we may treat these subjects in that manner.]

Translations.

TREATMENT OF FRACTURES BY MASSAGE.

By DR. BERNE.

Translated from *Journal de Médecine de Paris*, by F. A. HARRINGTON, M. D., Assistant to the Chair of Materia Medica, Niagara University.

Various sessions of the Surgical Society have been devoted, in part, to the question of treatment of fractures by massage. Having an experience of four years in this method of practicing surgery, I think it is a duty to relate my personal opinion on the subject. In relation to fractures of the fibula, the priority of research on that special subject is mine. I performed, in the service of Professor Duplay, then in the hospital at Lariboisière, a series of experiments in this particular mode of treatment. The preceding year, I had treated one of my patients, examined by Doctors Love and Coupard, employing, from the first day, massage for the treatment of a fracture of the fibula, situated two centimeters above the external malleolus. The patient was able to walk perfectly on the seventieth day.

It is important to determine the indications and the conditions for this course of treatment.

First, what fractures are with propriety treated by massage? They are the fractures near the ends of limbs, which have two bones, the leg and forearm. Nor must we forget to describe another class of fractures : that of the patella and olecranon. As regards the radius,

all the fractures of its lower extremity cannot be treated by massage at the beginning, but all should be on the fifteenth day. In case of the fibula, massage can be practiced early, when there is opposition of the fragments.

Secondly, is it necessary to immobilize the fractured limb, or to leave it free?

Lucas-Championnière uses no apparatus; but my own personal experience teaches that, although you can massage certain fractures of the radius without fixation, you should combine fixation and massage, by using some appliance in the treatment of fractures of the fibula. At the time of my investigations at Lariboisière, in 1885, the fractures were put up in plaster splints, which were applied simply posterior, and fastened by three or four circular bands, furnished with buckles, and easily removed at each visit. Massage was performed every second day, for ten minutes, and the cure was complete in from fifteen to seventeen days, under the treatment. Unfortunately, my observations remained unpublished, I regret to say; not that I might claim priority, but as proof of my theory. Massage should not be practiced, to begin with, only in case of fractures without displacement; and it is a great advantage to have the limb in an apparatus that can be removed.

Massage is performed, not to render the formation of the callus more active, but to favor the absorption of extravasated blood, and to prevent adhesion of the tendons. It is necessary to massage the tibio-tarsal articulation in fractures of the fibula, and, in fractures of the radius, the small carpal joints. Shedè, of Hamburg, and Neutzel, of Trieste, early employ massage and immobilization.

Massage must not be employed, to begin with, whenever there is any displacement; otherwise, it should be done at once. In a fracture of the radius, you will not make active motion, but merely passive, during the first week; afterwards, motion of any sort whatever can be made.

In fractures of the patella, massage should be practiced immediately.

To resume, in the treatment of fractures by massage, your aim is, at first, to favor the absorption of extravasated blood, but you have nothing to do with the fractured bone, for the callus forms of itself. It is necessary to immobilize the joints adjacent to the fracture.

The kneading of the muscles of the calf and the forearm favors the lymphatic and the venous circulation. In this way, the normal

temperature is preserved, whereas, if the limbs are immobilized for a long time by an apparatus, there is a marked lowering of temperature.

The results of my experiments have been published.

Massage should be performed according to certain rules, depending on age and on the requirements of each case. It should be done by a person who is skilled in its performance; it needs to be carefully practiced, and then only a short time, otherwise it is useless and injurious. It is a profound mistake to think it is a gain to massage a limb for more than ten or twenty minutes.

To summarize, massage is applicable to fractures of the extremities of bones near the joints, taking into consideration the age of the patient, the diathesis, rheumatic, etc., and the age of the fracture.

It should be performed for fifteen minutes at the most, and once a day, or every alternate day. If the attending physician is unable to perform massage himself, he should preferentially employ some older method of treatment rather than place his patient in the hands of an assistant who is unskillful or rough.

342 Fourteenth street.

Miscellany.

FOR WASHING OUT THE BLADDER, Ultzmann, of Vienna, recommends, in *Centralblatt für Chirurgie*, the following: For irritable bladder, lukewarm water, with a little tincture of opium, or solution of cocaine, $\frac{1}{4}$ per cent.; or resorcin, $\frac{1}{2}$ per cent.; or carbolic acid, $\frac{1}{6}$ per cent. Solution of permanganate of potassium, $\frac{1}{10}$ per cent.; or amyl nitrite, gtt. iij, to water, Oj, will prevent decomposition of the urine. He recommends for phosphaturia $\frac{1}{10}$ per cent. salicylic acid.

THE *St. Louis Weekly Medical Review* says that a young Texas physician, called to his first case of labor, found the bag of waters presenting, which, mistaking for the bladder, he tried to replace, with the result of rupturing it, allowing the fluid to escape. Rushing frantically from the room to a neighboring physician, he cried: "By Jove! she's busted. Get your instruments—she won't live an hour."

AN EXAMINATION FOR LICENSE TO PRACTICE.—The Board of Health of Dakota recently examined an application for a license to practice medicine. He had been practicing medicine for years in Dakota. Here are some questions and answers: "What medical paper do you take, Doctor?" "Well, I can get along without them." "What books have you in your library?" "'Gunn's Family Physician and Common-Sense Home Doctor.'" "Name the three great cavities of the body?" "The head, the belly, and the diaphragm." "Name contents of abdominal cavity?" "Kidneys and the prostate gland." "Have you treated any cases of enlarged prostate?" "Lots of them." "With what success?" "Tiptop! never lost a case." "Did you ever treat any female for enlarged prostate?" "Oh, yes; numbers of them."

ANOTHER CURE FOR CONSUMPTION.—Prof. Luton, of Rheimes, asserts that a cure of tuberculosis can always be effected by the employment of the phosphate of copper, which, however, must be in the nascent state and soluble in an alkaline body. His formula is as follows:

R_x—Acetate of copper neutral grammes 0.15
 Crystallized phosphate of sodium . . . grammes 0.75
 Glycerine and powdered licorice, of each, q. s.
 This for one pill.

THE WONDERS OF THE TELEPHONE.—A physician reports to us, says the *Medical Age*, December 10th, that he was saved a two-mile ride through a driving storm the other night by having the patient, a child, brought to the instrument and held there until it coughed. He diagnosed false croup, prescribed two grains of turpeth mineral, and turned in for an undisturbed sleep during the remainder of the night. He found the patient in the morning doing nicely—under the care of another doctor.

DR. BARTHOLOW'S favorite prescription for cholera infantum is:

R_x—Bismuthi s. nit. 3 i.
 Pepsini sacch. gr xxx.
 Zinci oxide gr. v.

Met. Ft. Chart. No. 6. Sig: One every 4 to 6 hours, or oftener if necessary.

A PHYSICIAN going his rounds among some small-pox patients in a hospital, and stopping by the bedside of an Irishman, inquired : "Well, Pat, how are you to-day?" "Faith, sir, I'm better ; but I am so wake that I should not be surprised at all if some one was to come and tell me I was dead."

THE *Medical World*, Philadelphia, has issued a visiting list on a new plan. It is in sections—one book for each month. A neat leather case is provided, into which the monthly parts are slipped. By this means, plenty of space is provided, and, at the same time, a small flat book, convenient for the pocket.

NUTRIENT ENEMATA.—Prof. Ewald, of Berlin, has recently made some careful experiments with different nutrient enemata, and has found that enemata of eggs were of decided service, and that they were as efficient and satisfactory without being peptonized as when they were subjected to this process.

A HOMEOPATHIC doctor, addressing a graduating class of nurses the other day, said : "Some trained nurses are trained nuisances. The tongue is the most dangerous thing provided you by nature. Learn to keep your mouth shut." Good advice for other than homeopathic nurses.

THE *Scientific American* suggests as a means of relief in chilblains the following : Dissolve an ounce of ammonium chloride in half a pint of cider vinegar, and apply frequently. A half-pint of alcohol may be added to this lotion with good effect.

WIFE (to third husband)—"If you feel so unwell, John, I think we had better send for my old family physician." Third husband (somewhat hastily)—"No, my dear, I would prefer to send for some one else."

ANTISEPTIC CANDLES are the latest novelty. They are made by combining iodine and salicylic acid and incorporating with fats, paraffine or wax. Phenol is produced by the decomposition of the salicylic acid.

LAWYER (in hoarse whisper)—"Doctor, I have such a cold this morning that I can't speak the truth." Doctor (sympathetically)—"I am glad it isn't anything to interfere with your business."

Selections.

MANAGEMENT OF THE PLACENTA, IN THE THIRD OR PLACENTAL STAGE OF LABOR.

By T. GRISWOLD COMSTOCK, M. A., M. D., PH. D.,

Master in Obstetrics (Vienna).

When the child is born, the second stage of labor is completed, and the third stage of labor is commenced, and demands the attention of the obstetrician. Having attended over twenty-five hundred cases of labor, I will give my experience :

When the second stage is nearly terminated, and the child is about to be delivered, the practitioner should assist the contractions of the uterus by placing one hand over the region of the fundus, and keep it there until the child is born, and as the uterus goes down, and involution already commences, he should maintain gentle pressure upon the fundus until the placenta is delivered. By means of this simple maneuver, nature will be assisted, and (with the rarest exceptions) the afterbirth will be delivered without any untoward accident. We were formerly taught that the placenta should be delivered in twenty minutes, or means should be taken to deliver it by manual extraction. This is an error, because many cases occur, especially after difficult labors and where forceps have been applied, when the placenta will be delayed for one hour or sometimes even two hours, and not the least harm results. I am now supposing that the practitioner or intelligent nurse remains by the side of the woman with one hand over the fundus, as mentioned above. If, after twenty-five minutes have passed, the parturient patient has no pain, the practitioner may insinuate two fingers into the vagina, guided by the cord, and see if he can find that the afterbirth has come down into the vagina, and seems to be detached. He may then make very gentle traction upon the cord, and, at the same time, press with a little force upon the fundus, and see if it excites any pain. If the woman has no pain, he should wait patiently for from ten to twenty minutes longer, and then may make gentle traction once more, and see if any pain is excited. If no pains result, then let him wait patiently until the hour is up, when he may make careful manipulations over the fundus, and, at the same time, make a little traction upon the cord. He may also ask his patient to blow

into one hand and repeat it for several times, and often this will excite a pain. As soon as the pain sets in, let him keep up the abdominal pressure, and make traction upon the cord, so as to assist in the final expulsion of the placenta, until it is out of the vagina, when it should be carefully twisted around so as to bring out with it all the membranes, and make a clean delivery. After the complete expulsion of the placenta and removal of all blood-clots, the practitioner's duties have not ended, for it is better to still keep up pressure for a few minutes, and see that the womb remains contracted, that the involution may be permanent. This plan of treatment, if quietly and persistently carried out, will prove a perfect success in, I might say, almost every case.

Regarding the administration of ergot, I follow the special instruction of Prof. Pajot, of Paris, who says: "*Never give ergot when there is anything in the uterus.*" I think this advice is approved of by the best obstetrists and gynecologists of this country, and for many years I have strictly adhered to it, although I was taught just the opposite by my earlier teachers. After the placenta has been delivered, if you think the involution is not complete, or if you fear that hemorrhage may set up, you may then give a dose of ergot.

I have quoted the high authority of Pajot, and I will now quote Robert Barnes, who says: "*The rule is imperative not to give ergot during the placental stage.*" It is high time that this question should be settled, for we are convinced that ergot is employed as a rule by most physicians in country practice, but it is against reason, science and experience. Our objection to ergot given at this period is, that it may possibly defeat the very object in view. When the uterus contains either the foetus or the placenta, ergot, if administered, will probably excite irregular and tetanoid contractions, which will lock up the placenta and actually keep it imprisoned within the womb, and render attempts to extract it difficult and even dangerous. The method we have described for removing the placenta was taught us years ago, while a student in Vienna, and is known and recognized in Germany as Crede's method, although it was practiced at a much earlier date by Mauriceau, Busch, R. Barnes, McClintock, Hardy, and others; but, as remarked by Sydney Smith, "*it is not the man who first says a thing who deserves the credit, but he who says it so loud and so long that at last he persuades the world it is true,*" and for this reason we shall continue to give Crede the credit for this safe and uni-

versally successful method for removing the placenta, because he has succeeded in *persuading obstetrical authorities* that it is the best method in the conduct of a labor during the placental stage.

In my recommendation of the removal of the placenta by expression, I do not wish to be understood as opposed to active interference when hemorrhage is present or threatening, or when we have an adherent placenta to deal with. In such an event, of course, it is rational and proper to remove the cause at once, and it may be required to deliver the placenta forthwith by manual interference, in accordance with the rules of obstetrical art (*secundum artem*).

I will, therefore, close this article by summarizing as follows :

(1) During the last stage of the second period of labor, the obstetrist should press steadily upon the abdomen over the region of the fundus, during each pain, until the child is quite delivered. (2) After the delivery of the child, gentle pressure should be still kept up until the complete expulsion of the afterbirth, and this pressure should be maintained for some minutes, until the practitioner is satisfied that the uterus remains well contracted. (3) This practice, if carried out with requisite skill and patience, will be followed with perfect success, *without the administration of ergot*, and exceptions will occur only very rarely. The aphorism of Blundell, "*Nec temere, nec timide*," is a good one, and is quite as true to-day as it was when asserted by the celebrated authority above quoted. In some instances, the advice of Dr. Cordes, of Geneva, of "armed expectancy," or, perhaps, masterly inactivity may be best, temporarily, but the obstetrist must be the judge, and when nature requires any assistance, it is his duty to act, and act promptly, for the more perfect the physician is in science, the more adroit and skillful will he be in his art ; but let him always bear in mind the wise advice of the Roman philosopher, Seneca : "*Omnia ars et scientia, imitatio naturæ est.*"

I may add, finally, that I consider the forceps the child's instrument, and a means to save such pain for the mother, so that, statistically speaking, I have found it requisite to apply them, for the past ten years, about once in thirty cases of labor.

It is always my custom to apply a bandage after the labor is completed. I do not insist that this is always absolutely requisite, but often it is necessary, and, when properly applied by the practitioner himself, it never does any harm.

THE NATURE OF THE HYMEN.

By DR. BLAND SUTTON, of London, Eng.

In remarks before a recent meeting of the British Gynecological Society, the author pointed out that the hymen was formed in the same way as the rectum, that is, by the invagination of the epiplastic layer which comes into contact with, and fuses with, the primitive gut in its posterior segment. The distinction between the two remains throughout life, for, in the rectum, a ridge of adenoid tissue marks the situation where the squamous epithelium of the angle joins the columnar cells of the rectum. In the vagina, the corresponding spot was indicated by the hymen or its remains. The mode by which the proctodoeum and the gut become fused, is as follows: When the two culs-de-sac come in contact and exercise pressure on each other, the edges gradually cohere and join organically. At this stage, the lumen is still obstructed with a thin septum; this gradually became thinner from pressure, and, ultimately, perforation took place. The hole increased and the septum slowly disappeared until a complete channel was the result.

In the case of the anus, it was clear that if the invagination failed to reach the gut, an imperforate rectum would be the result. From the study of those conditions, it was clear that the hymen was merely a thin septum resulting from the imperfect coalescence of the proctodoeum with the uro-genital section of the cloaca. Should the septum be complete, it would be termed an imperforate hymen. Occasionally, the perforation was multiple, concentric or cribriform.

Similar evidence as to the nature of the hymen was obtained from the opposite end of the alimentary canal. The mouth and pharynx, with the associated structures, were derived from an involution of the surface epiblast, named the stomodaeum. This met the blind anterior end of the foregut at a spot eventually coinciding with the cricoid cartilage. Should those parts fail to unite, an imperforate pharynx was the result. When the coalescence was imperfect, then a hymen-like diaphragm might be found. So far as the alimentary canal was concerned, diaphragmata of this nature occasionally existed between the pharynx and the esophagus in the duodenum, immediately above the entrance of the bile duct, and in the rectum at the point of union of the anus and gut.

Thus the formation of a diaphragm, sometimes complete, but more commonly perforated at the entrance of the vagina, was only in agreement with what occurred in other parts of the body, when two culs-de-sac coalesced to form a continuous passage. Lastly, abnormalities of the vaginal orifice were not infrequently associated with defects of the alimentary canal. This might be expected, taking into consideration the embryological relation of the part with the cloaca.

NAPHTHOL AS AN ANTISEPTIC MEDICAMENT.

Bouchard has communicated, to the French Academy of Sciences, the results of a series of researches, from which it appears that naphthol, one of the derivatives of naphthaline, is an excellent antiseptic, surpassing even iodoform.

Kaposi, several years ago, called attention to the value of this agent in the treatment of certain diseases of the skin, and particularly of scabies. He employs naphthol in a ten per cent. alcoholic solution, or in the form of ointment, and says that one or two applications will cure the most inveterate cases of common itch. For this purpose, an ointment may be made with one part of naphthol and ten of vaseline. He has had equal success with naphthol in psoriasis, eczema, and ichthyosis, and there is nothing better, he says, to allay tormenting itching of prurigo.

Heusinger also speaks in high praise of naphthol as an external agent (alcohol lotion or pomade) in the skin diseases mentioned above, in lupus erythematosus, and in chancres. Under its use, sores of a phagedemic character rapidly take in a healthy action. Van Harlingen, moreover, has seen favorable results from naphthol in obstinate cutaneous affections.

The experiments to which allusion has been made, have led Bouchard to regard naphthol as one of the best and safest of antiseptics. According to these, a three per cent. solution markedly retards the development of the typhoid bacillus, as well as that of the bacillus tuberculosis. The same solution is fatal to the microbes of several of the parasitic diseases of animals, and prevents fermentations. Bouchard gives naphthol internally in typhoid fever, and believes that, if it does not abort this disease, it certainly renders its course milder. He regards a dose of forty-five grains (2.50 grammes) a day as realizing the conditions of intestinal antiseptis, and affirms that, in such doses,

there is no antiseptic agent which is more innocuous. This use of naphthol in typhoid fever has been followed to some extent in this country with apparently favorable results.—*Boston Medical and Surgical Journal*.

INFANTILE DIARRHŒA.

The diarrhœas of infantile life may be divided into two classes: those characterized by an excessive fluidity of the fæces and those distinguished by greenish discharges. The latter variety is the more common, and to this we will now give our attention:

Green diarrhœa was, until recently, considered to be the result of enteritis, resulting from and causing digestive troubles. The green color was thought by some to be derived from the biliary pigments, and by others from decomposition of the blood in the presence of sulphur compounds. To Damaschius, Clado, Hayem and Lesage belongs the merit of casting new light upon these obscure questions. From the researches of these authors, it has been determined that there are two varieties of green diarrhœa.

The *first* is caused by derangement of stomachic and intestinal digestion. There is marked acidity of the stools, and a microscopic examination of the discharges reveals no special microbe, nor will the cultivation of any of the varieties found develop a green color.

The *second* variety is due to the presence of a special microbe, the *bacillus chromogenus*. The reaction of the stools is neutral. Thus we have the means of a rapid and accurate differential diagnosis.

While the former variety is not, as a rule, a serious disease, the latter will lead rapidly to a fatal termination, unless speedily combatted. The green diarrhœa, not caused by bacilli, is due to errors in diet. Blot and Gueniot have cited cases produced by over-feeding. The treatment consists principally in regulating the diet, and administering alkaline waters, such as Vichy or Aqua Calcis in ʒiii at each feeding.

The latter variety of green diarrhœa is liable to follow the former, or may be suddenly developed in previously healthy children. It differs from the former in being distinctly infectious, so that in an asylum a single case will soon develop a true epidemic. Air is the common vehicle of the microbe, although it may be carried in water or milk.

This form of diarrhoea requires a treatment almost contrary to the former; alkalis would aggravate the conditions, and acids are indicated. Hayem recommends a two per cent. solution of lactic acid given in drachm doses every hour or two, according to the severity of the case. The acid should not be given for a-half hour before or after nursing.—*Hayem and Lesage in Bulletin Medical.*

CONTRIBUTION TO THE STUDY OF SEPTIC INTOXICATION.

The following is a summary of the conclusions reached by Kose-powton in a paper on this interesting subject:

1. The microbes of putrefaction introduced into the tissues or blood of healthy animals induces no pathological change.
2. The saline solution in which the microbes of putrefaction are developed changes its properties and becomes a true poison.
3. The poisonous principles found in this saline solution resemble none of the products which may be obtained from the salts, and, consequently, must be produced or excreted by the microbes, the saline solution serving as a culture fluid.
4. When these putrefactive processes take place in the presence of air, chemical compounds soluble in water and alcohol are developed, which, on injection in animals, will produce elevation of temperature.
5. Putrefactive processes, with the air excluded, form chemical compounds, which act principally on the nervous system.
6. Inoculation with putrid matter is followed by symptoms differing materially from those of an infectious disease, and corresponding closely with those of poisoning.
7. The active principle of putrid matter is a chemical compound, the action of which depends upon the relative amount or dose given to the animal experimented on.—*Wratsh.*

CONTEMPT OF COURT.

Of all the curious reading that we have enjoyed in some time, we think that afforded by a communication from Dr. F. E. Stewart to the current number of the *Druggists' Circular*, certainly caps the climax. It affords a splendid illustration of the wisdom of the adage which advises the shoemaker to stick to his last. Whenever a physi-

cian strays from his own profession into the intricacies of the law, and especially of the patent laws of this country, his feet are on dangerous and slippery ground, no matter where his head or heart may be. In the present paper, Dr. Stewart attacks the recent decision of the United States District Court in the matter of the suit of Battle & Co. against the Grosses (Daniel W. and Edward Z.), for infringement of their copyright of Bromidia. He declares that the decision is not final or binding, and advises the Grosses, and druggists generally, not to pay any attention to it. Dr. Stewart thus puts himself in contempt of the United States Courts, and advises others to place themselves in the same foolish and dangerous predicament. The queer part of the matter, however, is that every reason which he advances against the validity and justice of the decision is the strongest possible argument in its favor, and the reader must be obtuse, indeed, not to see that it is so. The view of it was evidently taken by the editor of the *Circular*, who says: "While giving Dr. Stewart's argument publicity on account of its novelty, we think it proper to remind pharmacists that they are bound by the decision so long as it is allowed to stand"—which advice is good, sound sense, like pretty much everything that emanates from the editor of the journal quoted.—*St. Louis Medical and Surgical Journal*, January, 1888.

SEXUAL RELATIONS AS CAUSES OF UTERINE DISORDERS

Is the heading of a timely and important article by Dr. William Goodell, of Philadelphia, in *Progress*, for October, 1887. The writer first speaks of the effects upon the female genital organs of the nervous erethism of long engagements. The love between man and woman is not merely an intellectual process, and the ante-nuptial relations sanctioned by custom in this country are the sources of diseases of which it is the duty of the physician to ascertain the cause and apply the remedy. The excesses of the honeymoon trip are to be deprecated. Counsel should be given regarding unmastered sexual excitement, while criminal abortion must be denounced. Scriptural and other authority are quoted to prove the sin of preventing conception, and a case is given, illustrating the harm resulting from intentional incomplete coitus. The various advantages of carrying out honor-

ably, yet fully, the command to be "fruitful and multiply," and the serious mental and physical effects produced by any effort to baffle the laws of God, are pointed out in a manner that cannot fail to impress the reader.

CANCER AND CANCEROUS DISEASES.

In the Morton Lecture, recently delivered before the Royal College of Surgeons, of England, Sir James Paget pointed out a number of interesting and instructive analogies between the processes of plant and animal life, as calculated to throw light on the nature of cancer, and also some interesting speculations as to a future possible cure for it. Mr. Paget contends that the whole study of tumors may, indeed, find admirable illustration in vegetable pathology. The xylomas or tumors of homologous woody tissue he compares to the benign tumors found in human pathology, while the many varieties of galls may be taken to represent malignant growths. The xylomas are outgrowths from the healthy wood that seems to have received no injury, and are apparently developments from adventitious or latent buds, while the galls are morbid growths that result from the stings of various insects, just as benign growths in the human organism are developments of what may be considered latent embryonic tissue, and the cancerous and other essentially harmful local manifestations of disease may be considered as indicating the results of irritation by a specific virus. The galls are all the result of the stings of insects, and they amount, in all, to more than a thousand varieties. Each insect, with an instinct as unfailing as natural law, deposits its eggs, with the accompanying virus, on a leaf or other part of the very plant in which the right kind of gall can be formed. Each virus requires a susceptible and fitting place or substance. Something like this, Paget believes to be the case in cancerous diseases. Cancer requires first the system capable of the proper reaction, the condition of blood, etc., in which cancer can flourish, and then the specific virus that alone can produce cancer. In this position, the eminent teacher seems to be thoroughly established and fortified.

But, leaving the exact line of argument of Mr. Paget, it is worth while to ask how much of the method and sequence of reaction is due to the virus in all infectious diseases, and how much to the capabilities of the system for reaction?

In the first place, a benign woody tumor is not the exact counterpart of a benign tumor in animal tissues. It is the function of many plants to form buds anywhere beneath the bark, and of some in any cells, even in the leaves. These adventitious buds might anywhere become aborted shoots or twigs; they are the counterparts of true moles among animals, or possibly of dermoid cysts. The illustration drawn from galls has a better application. In these instances, then, we might inquire what part is performed by the virus, and what part by the organism? Does the virus which the insect deposits as it lays its egg enter into the vital forces of the tree to determine a gall of a certain shape, size and chemical constitution, or does the tree or plant of itself possess the inherent power of reacting in a particular manner, which results in the production of a certain character of gall or other growth? Taken in the human body, does the virus of small-pox join in the definite processes that result in fixing the duration of the fever, the time of the outbreak, and all the rest of the orderly processes observed in a case of small-pox, or do these powers belong to the system, to be called forth in different ways, according to the nature of hurt received by it?

We think they belong to the organism, and not to the virus. The virus is almost passive. The case seems to be not unfitly represented by the siege of a fort. An enemy approaches to take it, and upon the movements of the enemy, upon the nature of the attack, will depend the character of the defense. Which cannon shall be fired, where a ditch shall be dug, where pickets shall be placed, where a mine shall be exploded—all depend upon the position of the enemy, but the people in the fort do all of these things of themselves. As many obvious means of defense as the human organism possesses, as many words, as many different possible movements, either of definite expression or otherwise—they probably do not all approximate in number and variety the vital reactions possessed by the cells of the body. Cancer, then, in our opinion, as it presents itself to sight, is an effort of the system to throw off a foreign hostile substance of which we know, so far, absolutely nothing. It may be a microbe, it may be degenerate bioplasm, or it may have some other nature; still, only this we know: it is hostile.

It would be unprofitable, perhaps, to carry out the long train of speculation to which this subject might lead. What we want most is a cure, a specific, as pointed out by the great lecturer, like that which

mercury furnishes for syphilis, and quinine for malaria. And, whatever else is done, something in the way of medication should be tried for every cancer. If it cannot be operated on, something not already a proven failure should be tried for its cure; if it can be, or has been operated upon, then for the prevention of its return.—*American Practitioner and News*.

BORACIC ACID IN THE TREATMENT OF LEUCORRHEA.

For months past, I have made frequent use of boracic acid in the treatment of leucorrhœa in a manner hitherto unmentioned, at least so far as has come under my notice, and with surprising success; in every case where I applied it, prompt and permanent improvement resulted.

Having had some excellent results from the boracic acid packing in chronic suppurative otitis, I determined to resort to its use in a similar way in a case of leucorrhœa, which had for several months resisted a most persevering use of the regular orthodox remedies—*i. e.*, nitrate of silver, tincture of iodine, fluid hydragris and bismuth, hot water irrigations, etc. The experiment was eminently successful, and the patient returned home within a fortnight well and happy, and has so remained ever since—many months—during which time I have had occasion to resort to the remedy frequently, and with uniformly good results.

My manner of using it is as follows: Having first irrigated the vagina at as high a temperature as can well be borne by the patient, a cylindrical speculum is introduced, and the vaginal wall very carefully dried—first with a soft sponge, and then with absorbent cotton. This done, boracic acid in crystals is poured into the mouth of the speculum, and pushed up against the uterus and vault of the vagina with a clean cork caught in a uterine sponge-carrier, sufficient acid being used to surround and bury the intravaginal portion of cervix, filling the upper part of vagina. A tampon of absorbent cotton is then firmly pressed against the packing, and held *in situ* until the folds of the vaginal walls close over it as the speculum is withdrawn.

This should be allowed to remain three or four days, or even longer, as after this time there still remain some undissolved particles of the acid; nor will the tampon seem at all offensive. The ostiom

vaginæ, if examined in twenty-four hours, instead of being besmeared with the leucorrhæal secretion or discharge, presents a clean appearance, and bathed in a watery fluid which begins to appear several hours after the packing has been placed ; and, in my cases, this was the only discharge noticed afterward.

However, a second, or even a third, repetition may be necessary ; but in none of my cases, numbering nearly a score, have I found more than a second packing called for, and in many one sufficed ; and in no instance has it occasioned pain, not even inconvenience. I do not claim for this agent and method infallibility, nor should constitutional dyscrasias be ignored, and this local treatment be depended on, unaided, to effect a cure ; but here, as in the treatment of leucorrhea by other remedies, a proper association of all means having a curative influence upon the disease, constitutes the rational therapeutics. My individual experience with this remedy in the treatment of leucorrhea, though limited to few cases, to establish its universal efficacy, if such a wide range of power can be claimed for any medicine at any time, none the less proves it as one of the agents which, when properly employed, promises much in the treatment of the annoying and, sometimes, intractable conditions constituting the pathology of leucorrhea, particularly when the change is in the vaginal glands or mucous membrane, or from intracervical inflammation. Nor will harm likely result from its use, though it fail in maintaining the place my experience would give it.—*Schwartz, in St. Louis Cour. of Med.*

LAPAROTOMY IN SUPPURATIVE AND TUBERCULAR PERITONITIS.

At a recent meeting of the Clinical Society of London (*The British Medical Journal*, November 5, 1887,) Mr. Barwell reported a case in which, during an acute peritonitis, following a blow upon the abdomen, he had opened the peritoneal cavity, sponged its lower portion, and washed it out with distilled water, bringing away quantities of flocculent pus. The wound was sewn close without drainage. There was rapid convalescence.

Mr. Knapp reported a case in which the abdomen was opened for a supposed ovarian cyst, and the peritoneum, mesentery, and intestines were found covered with tubercles. The cavity was washed out with warm water. The patient recovered, but had evidence of

pulmonary tubercle. He alluded to the remarkable experience of Tait, who claimed uniform success so far as the operation was concerned, with complete cure in eighty per cent. of all cases of tubercular peritonitis.

Dr. Clarke reported a case of ascites with dullness over the left lung, temperature 100.2° F., pulse 120. On opening the abdomen, the intestines and peritoneum were found studded with little bodies like boiled tapioca grains. The cavity was well disinfected with a one per cent. carbolic solution. Convalescence was uninterrupted, and in six weeks the patient seemed perfectly well.

Mr. Treves thought most surgeons would prefer to use a drainage tube after these operations. He referred to a record recently published in Germany, of ninety-seven cases of draining the abdomen for peritonitis, and to Kussmaul's paper comprising thirty cases, with six others subsequently added, making thirty-six cases with six deaths, two from the operation, and four from general tuberculosis. A discussion as to methods and indications for the operation followed.

Professor Breisky reports (*Centralblatt für gesammte Therapie* June, 1887,) a case of operation for supposed ovarian tumor, in which widespread intestinal tuberculosis was found, as was demonstrated by examination of a small section of the peritoneum. The wound healed by first intention, and the patient improved in general health, although a pulmonary tuberculosis, which had existed prior to the operation, was unaffected by it.

Dr. E. Ceppi reported (*Rev. med. de la Suisse Romande*, May 16, 1887,) a case of chronic purulent peritonitis, cured by abdominal incision with drainage. The so-called Neisser's gonococci were found in the peritoneal exudation.

Besnier reported, at a recent meeting of the Paris Society of Medicine, a case of suppurative puerperal peritonitis, in which the abscess was encysted. Aspiration, the evacuation of five and a-half quarts of pus, iodine and collodion externally, and the free use of tonics, resulted in a cure.

THE TREATMENT OF WOUNDS BY IODOFORM TAMPONS.

Dr. F. Bramann reports (*Archiv für klinische Chirurgie*, Berlin, 1887,) the results of treatment of wounds in Von Bergmann's clinic for some years past. The gauze employed is sterilized by means of

steam at 212° , and, after drying, may be impregnated with an antiseptic solution. The sterilized gauze is used in cases of trifling operations in small wounds. In large wounds with more profuse secretion, it was thought best to obtain whatever advantage could be derived from the impregnation with corrosive sublimate, especially as the patients and operators are in the immediate vicinity of an audience coming direct from the anatomical rooms. The cotton employed is of late years merely sterilized. The towels, gum cloths, sponges, etc., are treated in a like manner. The silk used in sutures is wound on glass or metal spools, sterilized by steam, and enclosed in metal caskets. The catgut used for deep stitches (stitches of relaxation), and for ligatures, is kept ten to fourteen days in a solution of four parts bichloride, 800 of alcohol, 200 distilled water. This is frequently renewed. The catgut is then changed to an alcoholic sublimate solution of one to 800 alcohol and 200 parts of water, and is taken direct from this. The preparation of the patient consists in giving full baths, washing the region of operation with soap and water, shaving the part, rubbing the skin with ether, and disinfecting it with from 1 : 1,000 to 1 : 200 solution of sublimate. The instruments are kept in a three per cent. solution of carbolic acid. During the operation, the wound is often irrigated with 1 : 2,000 bichloride solution. In operations in the abdomen, the pleural cavity, the mouth, rectum and bladder, salicylic acid, 1 : 1,000, or boric acid, 1 : 200 is employed, and at the end of the operation a solution of iodoform in ether is generally used.

Next to strict antisepsis, the complete stoppage of bleeding is regarded as the chief agent in procuring union by first intention.

When the wound is dry, and the smallest bleeding vessels have been tied, the suture is applied with or without drainage, but only in those wounds which are considered absolutely antiseptic, and have not been infected through previous suppuration or contact with unclean materials. Among the cases treated in this manner are included all extirpations of tumors, removals of breasts, amputations, osteotomies, etc.

In wounds where the bleeding cannot be entirely stopped, the formation of a large clot is objectionable, not only on account of the pressure which it may make, as in fractures of the skull, but because of the risk of decomposition and blood poisoning. Although such clots may, through absorption and organization into connective tissue, aid in the process of repair, they sometimes remain fluid for

long periods, and during that time are a source of danger. Therefore, when it is impossible to dry the wound absolutely, or where there is the least suspicion that it is not entirely aseptic, after thorough disinfection with 1 : 1,000 bichloride solution, and with an ethereal solution of iodoform applied to the wound by the means of a syringe, it is loosely packed with strips of iodoform gauze of several feet in length, and three to four inches broad. They are applied so that the larger part of each strip lies in the wound, and the ends come out at the angles. The sutures were formerly put in at this time, but this has been abandoned on account of the difficulty in keeping them disentangled, and of their adhesion to the iodoform gauze. The patient is now anæsthetized a second time for the application of the sutures. The tamponed wound is covered with sublimate gauze and cotton and an antiseptic bandage. If the secretions make their way through the dressings, the superficial layers are renewed, but the iodoform gauze is allowed to remain undisturbed for two days. If it is then removed by gentle traction on the ends hanging out of the wound, the latter is found clean, unirritated, not reddened, absolutely dry, and it is only very exceptionally that a ligature is required. Careful suturing, with or without drainage, has resulted invariably in union by first intention, even in those cases in which, for any reason, as great weakness, or for the stoppage of bleeding from large vessels, the tampon has been left in from four to six days. His report of his results is extremely interesting, includes a large number of important cases, and appears to confirm his estimate of the value of this method.

*THE DIAGNOSIS AND SEPARATION OF PERITONEAL
ADHESIONS AROUND THE DISPLACED
UTERUS AND OVARIES.*

Schultz (*Zeitschrift f. Geburtsh. u. Gynäkol.*, Bd. xiv., Heft 1,) introduces a paper on this subject, with the statement that in most cases of fixation of the retroflexed uterus, the displacement occurs first, the organ being imprisoned in its abnormal position by a subsequent attack of peritonitis. The adhesions can usually be felt by the finger, introduced into the rectum or vagina. In obscure cases, the uterine canal may be dilated, and the finger may be introduced to the fundus, so as to steady the organ, while the hand over the abdomen is enabled to draw the fundus forward, and thus to estimate the strength

of the cicatricial bands. A sound may be substituted for the finger within the rectum, rectal palpation being practiced simultaneously. Anesthesia should be employed if the exact amount of mobility cannot be ascertained without it. The bladder and rectum having been emptied, the patient is placed in the lithotomy position, the examiner introduces his fore and middle fingers into the rectum, and presses them against the retroflexed fundus, at the same time resting the elbow of the corresponding arm upon his knee. If the fundus can be elevated as high as the promontory, it can then be grasped by the fingers of the other hand placed upon the abdomen. The site and extensibility of the adhesions can now be discovered; if these are slight, they will give way under the combined force of the two hands, while, if they are broader, they can be separated from the uterus by pressure of the external finger-tips.

Imprisoned ovaries may be freed by pressure made through the rectum; but when they are adherent to the posterior surface of the broad ligament, reposition is impossible. The finger within the rectum explores the surface of the prolapsed organ for a free edge, or an interspace between the ovary and its adhesions. If the latter can be found, the finger-tip is gently, but firmly, bored into it, when the adhesions will frequently give way. It may be necessary to repeat the operation before the ovary is completely freed. It must be effected very slowly and cautiously, the operator being especially careful not to make traction or pressure entirely upon the organ itself. The author adds that in several cases in which he practised this method of reposition, he never observed any unfavorable symptoms following the operation. Absolute rest and ice applications are recommended immediately afterward. The uterus and appendages are kept in their normal position by means of a suitable pessary. The dangers of the operation are not great, provided that a careful diagnosis has been made previously in the manner indicated.

TREATMENT OF SYPHILIS.

In the issue of the *Bulletin Gén. de Thérapeutique* of October 30th, we find a useful paper on the treatment of syphilis, by Prof. Verneuil. As a representative of the more conservative of French surgeons, Verneuil speaks with authority on such topics. The conclusions at which he arrives harmonize with the opinions most generally held.

He maintains the superiority of mercury. As respects the diagnostic value of the two agents—iodides and mercury—he never decides the question of specific lesion or not, except from the results of a trial of mercury. In three examples of old syphiloma of the testicle—cited for illustration—the iodide of potassium in massive doses failed to disperse the tumor, but mercurial treatment effected a cure in a few weeks, thus demonstrating the nature of the neoplasm.

Professor Verneuil does not advocate the huge doses of iodide of potassium now in vogue—2 to 3 grammes (30 to 45 grains) per day being his maximum—except in cases of rapidly destructive ulcerations of the nares, veil of the palate, and similar lesions, and even then in quantity not exceeding 75 or 96 grains *per diem*. He has never favored the conjoint administration of mercury and iodides. He prefers to give mercury by itself, and associated with remedies to improve the general state of the patient. He has occasionally made use of the combination of these remedies in slowly developing secondary or tertiary accidents when mercury does not act well, or has not been given at all. Under such circumstances, he prescribes in the simplest way $\frac{3}{4}$ grain of protoiodide of mercury and 15.5 grains of potassium iodide.

Mercurial frictions, although, in some cases, acting energetically, do not commend themselves to his judgment. When he has employed inunction, he has not dispensed with the internal administration of the protoiodide or some other mercurial, in small doses. Nor has he practiced the method of subcutaneous injection of mercurials, which often cures, apparently, in twenty to thirty days. He holds that the most certain curative results are obtained by the slow saturation of the organism as effected by the stomachal administration, rather than by sudden impression.

For the local treatment of syphilitic ulcerations, mucous patches, etc., the early manifestations of the constitutional state, he employs nitrate of silver, or chloral solutions, topically, in conjunction with the use of mercury internally.

A READY METHOD FOR REMOVING FOREIGN BODIES FROM THE ANTERIOR NARES.

Physicians are often called to remove peas, buttons, and various substances from the nostrils of children who have themselves introduced them there. A ready method for removing such substances is described

by Mr. T. Osborne-Walker in the *Lancet* for Sept. 17, 1887, where he states that recently a little boy was brought under his care with a button tightly impacted in the angle between the vomer and os nasi at the bridge in the right nostril. Ineffectual attempts at extraction had evidently been made, as shown by blood oozing from the nostril, and some, coagulated, adherent to the button, partially concealing its outlines from view, and also by the button being fixedly jammed in. In such cases, to prevent struggles and interruption, the child's arms, hands and legs should be first confined, by folding tightly round these and the body a long, clean apron, and then placing the child on an attendant's lap, facing a window, while the operator stands behind the patient, and, bending over and depressing with two fingers of the left hand the apex of the nose, to admit as much light as possible upon the object to be removed, with the right hand very carefully, to avoid its descent into the pharynx or larynx, the spoon end (with the concavity directed forward) of an ordinary pocket-case director should be introduced, with which at once, with a simple lever movement or jerk, the foreign body may be readily ejected.

By attention to the following points, the removal is instantaneously effected. The close confinement of the hands, arms and legs by a shawl, blanket, or apron; a good light; a reliable person to securely hold the child; the position of the operator behind the patient; depressing well the apex of the nose to obtain a good view of the object; and, lastly, getting the concave face of the spoon of a director fairly behind the body before making the forward lever movement.
—*Therapeutic Gazette.*

ON THE ADVANTAGES OF A COMPOUND SALICYLATED PLASTER.

Klotz (New York *Medical Journal*, September 17, 1887), in pursuance of a practice suggested by Prof. Pick, has, for the past several years, used, with great advantage, a salicylated soap plaster. After experimental trials of several formulæ, the following proved the most practical: Emplastri diachyli simplic. emplastri saponati, aa forty parts, petrolati, fifteen parts, acid. salicylici, five parts. The addition of the petroleum ointment was made to render the plaster softer and more pliable. It unfortunately lacks marked adhesive qualities, and requires, therefore, to be kept in place with a bandage. The plaster is

inexpensive, one ounce spreading about one square foot. It acts as an antiseptic, forms an efficient protective covering to diseased skin, preventing crust formation; on a dry surface, acting similarly, but in many respects more efficiently, to a rubber bandage, keeping the parts soft and pliable. The plaster finds its widest application in eczema, being useful in every form of this disease except the most acute stages. It acts admirably in fissured eczema of the fingers, in eczema of the forearm and legs; in ulcer of the legs, after healthy granulation has been excited, and, in fact, in granulating wounds resulting from any cause, as burns, dermatitis, caustics, etc. The plaster is changed at intervals of one or several days, according to the necessities of the case.

THE ETIOLOGY OF GASTRIC ULCER.—Impressed by the fact that women employed as cooks so frequently suffer from gastric ulcer, Decker (*Fortschritte der Med.*, B. v., 415,) instituted some experiments on the action of hot foods in producing the disease. Two dogs were repeatedly fed through the stomach tube with semi-solid food heated to 120° F. The first received nourishment in this way four times, and the other eight times. At the autopsy of the first dog, the mucous membrane of the stomach appeared normal in all parts, except at the lesser curvature, where there was situated a hyperæmic spot, about four-tenths of an inch in diameter, caused by a hemorrhagic extravasation between the mucous and muscular layers.

In the second dog, there was found a dark red area on the posterior gastric wall, about the size of a quarter of a dollar. The mucous membrane over it was shriveled, and resembled felt, and had been somewhat separated from the muscular layer by the occurrence of hemorrhage between them. In the pyloric region were two typical gastric ulcers, extending to the serous layer. The author considers the hemorrhagic infiltration, the shrinking and elevation of the mucous membrane, and its final destruction, to be the three phases in the formation of gastric ulcer.

ACETANILIDE AS A NERVINE.—Influenced by the observations of Dujardin-Beaumetz, Dr. Seifert, of Würzburg, has essayed the use of acetanilide in various painful maladies. The results of this trial are given in a paper published in the *Wiener. med. Wochenschrift*, No. 35,

1887, an abstract of which is given in the *Centralblatt für die gesammte Therapie* for October, 1887. In two cases of migraine, it proved to be very effective in eight-grain doses, and it was also equally useful in six cases of general headache with anæmic basis. In three cases of trigeminal neuralgia, Dr. Seifert had excellent results. For the most part, his observations are in accord with those of Dujardin-Beaumetz.

A NEW HYPNOTIC.—Amylen-hydrat (*Dimethylathylcarbinol*, $C_8H_{18}O$) has been investigated by Prof. J. v. Mering, in Strassburg (*Centralblatt für die gesammte Therapie*, October, 1887), who has found it to be a hypnotic of some value. 15.5 grains dissolved in an ounce of water. It has a somewhat pungent and camphoraceous taste. In physiological action, it resembles paraldehyde, and, in power of effect, ranks between this agent and chloral. Numerically stated, he places them in the following order: Chloral hydrate 1, amylen-hydrate 2, and paraldehyde 3.

Amylen-hydrate can be given by the stomach or by the rectum. Dr. v. Mering advises the following formula for rectal-injection: $\mathcal{R}$ Amylen-hydrat. 5; mucil. acaciæ 20; aquæ destil. 50.

For cases of insomnia, due to, or accompanied by pain, he combines morphine with it.

CANADOL, A NEW LOCAL ANÆSTHETIC.—Canadol is a hydrocarbon derived from petroleum. It is a light, volatile, exceedingly inflammable liquid, with an odor resembling that of benzine. It is not soluble in either water or alcohol. By its rapid evaporation, it will lower temperature more rapidly than ether. Canadol may be used in slight operations in the same manner as the ether spray.—*L' Oculistique*.

Editorial.

THE NEW HEALTH PHYSICIAN.

The wheel of politics has made another revolution, resulting in the removal from office of one of the ablest and most enthusiastic health physicians it has ever been the fortune of our city to possess.

When, four years ago, Dr. A. H. Briggs assumed charge of the sanitary affairs of Buffalo, there was practically no Health Department in existence. Vital statistics were scarcely recorded, there were no health inspectors to search out and report on public nuisances, while the death-rate for the two years preceding his appointment averaged over twenty-three per 1,000. Dr. Briggs reorganized the department, so that no city in the Union has more accurate vital statistics; a thorough system of inspection was inaugurated, which has resulted in preventing epidemics of small-pox, a disease which has three times during his term of office been brought into the city, but in no instance did a single person outside of the family where the disease appeared contract the disease. The death-rate during the past four years has been only a little over nineteen per 1,000.

The citizens are, however, to be congratulated that an able and intelligent successor has been appointed. Dr. Edward Clark is one of the brightest and most active of the younger physicians of Buffalo, and will, undoubtedly, be able to fully maintain the excellent condition of the Health Department, which his predecessor succeeded in establishing. Dr. Clark has already instituted some measures which will result in improving the sanitary condition of the public schools, a reform which will be of incalculable benefit to our citizens. Being intimately acquainted with our health physicians, past and present, our sentiments toward them are very much like those of French in former times, when they had exchanged kings: "*Le Roi est mort. Vive le Roi!*"

"FREE TRADE" FOR PHYSICIANS.

We suppose that there are few physicians in the country who feel desirous of contributing to swell the surplus which the nation is puzzled to know what to do with. It is not within the province of the JOURNAL to discuss the advantages of Free Trade or Protection, but we believe we will have the sympathy of all our readers in advocating the removal of import duties on

surgical and all other instruments and appliances used in the diagnosis and treatment of diseases.

Those physicians who have had the advantages of a trip to Europe, usually purchase every instrument of which they have need there, because they find them to be from twenty-five to seventy-five per cent. cheaper than ours. Surgical instruments and appliances are, in this country, so costly, that their purchase is often a heavy drain upon the physician's income; and, to many physicians in country practice, the cost of instruments makes it utterly impossible for them to supply themselves with those which, in an accident or sudden emergency, may be essential to the saving of life, or the prevention of years of suffering to the unfortunate.

We believe that the advantages to the community in allowing free competition in all supplies needed for the sick and suffering, would far outweigh any individual injury to our own manufacturers.

It will be remembered with what an outcry the proposal to place quinine on the free list was received. Manufacturers who had acquired millions, extorted from the struggling pioneers of our great West, resisted the removal of import duties, and, by specious arguments, almost persuaded the representatives of the people that they were public benefactors in supplying the nation with quinine at about four dollars an ounce. A few weeks ago, quinine was sold in New York at twenty-five cents an ounce.

The same results, though, of course, in a lesser degree, would follow the abolition of import duties on surgical instruments.

By united action on the part of the profession, it may readily be accomplished.

APOMORPHINE.—The value of this agent, as a prompt and certain emetic, has been generally recognized. A serious objection to its use is the rapidity with which its aqueous solution changes color, and the authorities generally have declared that in this condition it loses its medicinal powers, and should not be

used. Dr. Murrell, of London, however, affirms that this is an error; that the development of color does not injure it in any way, and that the solution may be kept for years, and is safe to use hypodermically.

THE annual meeting of the Erie County Society took place on the 10th ult. Dr. John D. Hill was elected president for the ensuing year, and Dr. R. L. Banta vice-president. The official report of the proceedings was not received in time for publication in this number.

DR. F. S. CREGO, Professor of Nervous and Mental Diseases, in Niagara University, Medical Department, has removed to his new house, 280 Franklin street, which he built last summer, and which is a model, and well adapted to his business. We wish our friend continued prosperity in new surroundings.

Book Reviews.

Practical Microscopy—A Course of Normal Histology for Students and Practitioners of Medicine. By MAURICE N. MILLER, M. D., Director of the Department of Normal Histology in the Loomis Laboratory, University of City of New York. New York: Wm. Wood & Co. 1887.

This book we would commend most highly. There is no want of excellent books on the same subject, but, as a rule, they are adapted for the advanced student and skilled microscopist. The majority of doctors who have microscopes, however, have not had the advantages of modern laboratory training, and to them a work which gives the processes for the preparation and exhibition of tissues, which are simple and practical and free from details of technique applicable only to the expert, will be of great service. Again, the work differs from many more pretentious works, in that the illustrations, which are numerous, are mostly original, being from the author's pen drawings. All of

them are good, and some of them exceptionally beautiful and true. Those of our readers who do any serious work with the microscope, should buy this book.

An Index of Materia Medica. By CHAS. H. MAY, M. D., Instructor in Ophthalmology, New York Polyclinic, and CHAS. F. MASON, M. D., Assistant Surgeon, U. S. A. Wm. Wood & Co.

This little book belongs to Wood's series of pocket manuals. It contains a list of the pharmacopœal preparations, with doses, solubility, etc., together with some practical hints in prescription-writing. The book is interleaved and well adapted to serve as a note-book for students of materia medica. It is to be regretted that the authors have made the attempt to give instructions in orthoepy as well as materia medica, for they have managed to misplace their accents quite as frequently as they have succeeded in placing them in their proper positions. The subject of the pronunciation of medical terms is already in a sufficiently chaotic state, without placing such books as this in the hands of students to render their confusion worse confounded.

Operative Surgery on the Cadaver. By JASPER JEWETT GARMANY, A. M., M. D., New York: D. Appleton & Co. 1887.

This book is intended as a guide to the ordinary surgical operations. The importance of rehearsing important surgical operations on the cadaver is acknowledged by even the most eminent surgeons, and younger men should avail themselves of every opportunity of the kind offered. Whether such a book as this is necessary is, however, questionable. The surgeon who is preparing himself for an operation, ought not to need it. The advanced student can better prepare himself by the study of the subject in the great works on operative surgery.



VOL. XXVII.

MARCH, 1888.

No. 8

Original Communications.

EARLY DIAGNOSIS OF TUBERCULAR MENINGITIS IN CHILDREN.

By H. L. ELSNER,

Professor of Clinical Medicine, Syracuse Medical College.

The early diagnosis and prognosing of any given case is a source of great satisfaction and profit to the physician as well as to the patient. This must necessarily be so for a large number of reasons, which flash through our minds almost simultaneously. If the physician can, during the prodromal stage of a disease, accurately diagnose and prognose, he not only benefits the patient, but aids in raising the standard of his profession. There are many diseases which begin with similar symptoms, yet the subsequent course of each is different. It is often not only difficult, but impossible, to diagnose a case accurately during the first days of attendance. By carefully grouping symptoms, by a process of elimination and a knowledge of the previous history of our cases, we are better able to diagnose correctly. It will be my object in this paper to give you a few hints and symptoms which will aid in making an early diagnosis of cerebral tuberculosis. When we consider the comparatively large number

of cases that we are called upon to treat, the fatality of the malady, and the chronic course of the disease in many instances, we will at once agree that any symptoms which aid in early diagnosis require our careful attention and closest study. In giving the symptoms which have seemed to me sufficient for an early recognition of the disease, I am not drawing from the experience of others, but am giving the conclusions which have been deduced from a careful consideration of the cases seen in private practice. It matters little whether or not we accept, as proven, that a deposit of tubercles at the base of the brain cannot give rise to symptoms before inflammatory action takes place in the pia mater, or that simple tubercular deposit is sufficient to cause symptoms without meningitis. The fact remains, that in my cases there have been symptoms of disease before the meningitis proper manifested itself by an uninterrupted train of symptoms. The presence of any one symptom *alone* would not justify us in making the diagnosis of tubercular meningitis. It is in this disease, as in all others, a consideration of all that the case presents, that justifies a diagnosis. These symptoms are to be considered as prodromata, not as symptoms of the disease after it has manifested itself openly, and is marching rapidly from the stage of irritation to that of pressure; but as they often appear when they are followed by days of apparent health, only to renew themselves and finally merge into the continuous meningitis, which runs a rapid course and terminates fatally in from fifteen to twenty days. The symptoms to which I wish to call your attention are:

First—Altered disposition.

Second—Headache.

Third—Vomiting and constipation.

Fourth—Cerebral macule.

Fifth—Ptosis and facial paralyses.

Sixth—Convulsions.

Seventh—Pulse and fever.

1. *Altered Disposition.*—For several weeks before the outbreak of the disease, by well-defined symptoms, the mother or nurse, playmate or companion, notice a decided change in the

disposition of the child. Whenever a child, who has previously found pleasure in its toys, suddenly, for a day or longer, turns from them, or has moments when they are truly enjoyed, quickly followed by a dislike; manifested by its actions, we may safely (*when coupled with other symptoms*) look for some abnormality. In some cases, older children suddenly, while in the midst of their play, discontinue, lie down for a few moments, and are then again ready to resume. Other children, who have naturally a mild and quiet disposition, become unruly, unmanageable—seem entirely changed. Children who have been affectionate, fond of the caresses of parents, become at times petulant and irritable. In the case of a child nine years of age, who finally died of tubercular meningitis, one of the first early symptoms, and one which greatly annoyed the parents, was a dislike which the patient took to a younger sister with whom she had always played and for whom she had always evinced the strongest affection. In another case, it was useless for the mother to attempt to quiet a previously affectionate and loving boy of twelve, who finally yielded to tubercular meningitis. The only person whom he would mind was a neighbor for whom he had never shown the slightest regard, but who was now given the preference. Altered disposition, taken alone, may not be of much value as a prodromal symptom, but when, added to it, there is marked emaciation and one or more of the symptoms mentioned, it becomes one of great value.

2. *Headache*.—The headache which was found in those children who were old enough to describe their symptoms, was not the same in character in all cases. I have frequently watched children, to note the expression of their face during the hydrocephalic cry, and have come to the conclusion that it is caused by a pain of a shooting or darting character. If you will watch the facies of a child during the cry, I am satisfied that you will agree with me in my conclusion. Frequently, older children have for weeks before the manifestation of continuous meningeal symptoms complained of a very severe and acute cephalalgia. Often you will find the only early symptom in a case the severe headache,

which may last for several hours, followed by days or weeks of health, to be renewed at shorter intervals. Some describe a darting pain, quickly put their hand to the head, and as quickly appear perfectly normal, and in a few moments are again deeply interested with their playmates. A number of cases will offer as their only early symptoms acute and passing cephalalgia, followed by characteristic vomiting, which I have learned to consider almost pathognomonic of brain trouble, and which will be explained in the following pages. I think that I am safe in saying that persistent or recurring headaches in children, with normal temperature, when not dependent upon errors in diet or other explainable transient causes, and when accompanied with vomiting or other symptoms enumerated above, partaking of the character of the headaches described, are to be looked upon with suspicion, and meningeal tuberculosis may be expected in a large proportion of the cases.

3. *Vomiting and Constipation.*—Among the most frequent early symptoms of tubercular meningitis, we find vomiting and constipation. It is to the first of these symptoms that I wish more particularly to call your attention. The vomiting which we find as an early symptom is characteristic; it is one of the symptoms of greatest import in making the diagnosis during the prodromal period. I think that my readers will agree with me, after watching their cases to note this symptom and the manner in which it manifests itself, that from it alone can the early diagnosis be made in eighty per cent. of all cases in children. Now, let me tell you what we consider almost characteristic of this vomiting. A child, previously healthy, without any error in diet, *suddenly*, and without warning, vomits large quantities of fluid and mucus without color, but watery. No sooner has the child vomited, than it is ready to run along to its play; or if it suddenly awakens to vomit, it readily falls back into a natural sleep. The parents are usually surprised to find the child vomit, for they can attribute it to no error of diet or any assignable cause. The child will probably, after the first emesis, continue enjoying (to all appearances) perfect health,

until in the course of from three to five or seven days it again, without one moment's nausea or any expression of sickness, vomits the same large quantities, and seems entirely unaffected by the act, but ready to resume its occupation. If you have noticed children before they eject the contents of their stomachs when suffering from indigestion, you will find at first a pallor, the body covered with perspiration; in fact, you find all the attendants of nausea preceding the act of vomiting. Vomiting is followed by a relaxed and enfeebled state, during which the child wishes to rest, and its color is changed. In the vomiting of brain lesions in children, a different state of affairs is found. The vomiting is not preceded (as a rule) by symptoms of nausea. The child, while playing or during its sleep, while we are looking into its face and are not able to notice the slightest change in expression, without retching, suddenly throws up large quantities of fluid, and at first seems entirely unaffected. During the prodromal stage, you will frequently be consulted by parents, and asked to relieve this vomiting. The history of a large number of cases could be given where I have been asked to relieve this symptom, and in which the diagnosis of tubercular meningitis in its incipiency was made, giving a grave prognosis. It has become routine practice with me, after getting the previous history, to ask every parent presenting a child for treatment of vomiting as the foremost symptom, whether or not the child is sick long before vomiting, whether the child vomits unexpectedly, and what change is noticed in the condition of the child after vomiting. Given the case of a child who, without previous sickness, nausea or error in diet, vomits *suddenly, possibly repeatedly*, each time *without preceding sickness*, followed by a return to the same condition in which the child was found before the act, with or without some of the symptoms above mentioned, we may strongly suspect incipient meningeal tuberculosis. If this characteristic symptom is accompanied by constipation, we have an additional symptom which aids us in diagnosis. *Constipation*, as an early symptom, is only of value when associated with other symptoms. Children are prone at times to suffer from constipation, and it is not a

symptom that will justify us in making a diagnosis. If, however, a child presents who is constipated, at the same time has "meningeal vomiting" (allow me to suggest the term), and possibly one or more of the symptoms above mentioned, there could be no hesitation in making a diagnosis of meningeal tuberculosis in its incipency.

4. *Cerebral Macule*.—At the Poliklinik, in Vienna, it was routine practice with Monti to run his finger-nail along the skin of a child in whom he suspected brain trouble, and await the resulting macule. If the redness resulting was no more than it would be in a healthy child, and faded rapidly, he would exclude tubercular meningitis, but if the skin was suffused with a bright, red tint, and this remained for from five to ten or even fifteen minutes, he would turn to the class and invariably say, "*prognosis infausta est*." The cerebral macule is a symptom which Trousseau brought most prominently before the profession, and one which he considered of the greatest importance, yet not always pathognomonic of "cerebral fever." I cannot describe it better than to use the words of this renowned teacher: "When I gently made on her abdomen (speaking of a case), with my nail, cross markings, longitudinally and transversely, in less than half a minute the portion of skin which I had touched was suffused with a very bright, red tint, which was diffused at first, but grew by degrees fainter, leaving lines along the track where the nail had passed, lines of a deeper red color, which persisted for a pretty long time." "This is what I mean by cerebral macule." This cerebral macule is not always to be considered as a certain and unfailing symptom of tubercular meningitis, but I am satisfied that it is present in the larger number of cases. In many cases, it has materially aided me in making an early diagnosis. In August, 1879, was called to see a male child, two years old, who, without warning, was suddenly seized with convulsions, severe, and involving all extremities alike. In spite of the usual remedies, including ether, these convulsions continued for three hours. At this time, the cerebral macule was well marked; so well, indeed, that it was plainly noticeable wherever

the child was touched. For three months after these convulsions, the child was, to all appearances, perfectly healthy. At the end of this time, it was brought to me with the characteristic meningeal vomiting, cerebral macule well marked; gave a grave prognosis and diagnosed incipient tubercular meningitis. For six months after this time I observed the child, the cerebral macule was always present; finally, the child passed into the hands of another physician, but it died about twelve months after the first convulsion, of tubercular meningitis. In looking over my notes, I find many cases in which I was enabled, at my first visit, to make a diagnosis and prognosis of these cases, feeling justified in doing so after considering the symptoms, including the cerebral macule. You naturally ask: "Does this symptom show itself in any other disease?" It is occasionally noticed in other diseases: among them, broncho-pneumonia, with marked meningeal symptoms; also in cases where the diagnosis of meningeal congestion had been made. It is only exceptionally present in other than cerebral fevers. I have always looked for this symptom, and have, as a rule, found it present in the early days of tubercular meningitis. In the differentiation of typhoid fever with brain symptoms from tubercular meningitis, the presence of this symptom is invaluable in making the diagnosis.

5. *Ptosis and other Paralyzes (Facial).*—In a few cases which have come under my observation, ptosis was the first symptom which was noticeable. I well remember the case in which I first found this symptom. In the winter of 1878, I was called to see a lady who was in the last stages of tubercular consumption, treated her for some weeks, when, one day, the baby, a female, sixteen months old, was brought into the room for examination. The father said that the child was well, but could not keep its left eye open. He thought the "upper lid too long." Upon examining the child carefully, I was unable to find other symptoms that would aid in making a diagnosis. In a few weeks, there was ptosis of the right lid also. Then followed a time during which the child could only see when its lids were raised by others. In six months from the time of the first ptosis,

the child died of tubercular meningitis. In the case of a girl, ten years of age, ptosis was associated with headache, vomiting, and the cerebral macule. She died on the seventeenth day of the disease. Paralysis in children in the domain of the motor oculi, facial and hypoglossal, arising gradually with or without other symptoms of brain disease, are of the greatest importance, and are usually followed by tubercular meningitis. Though I have watched the condition of the pupils, I don't believe that they present any features which assist in the diagnosis of the disease under consideration.

6. *Convulsions*.—The fact that a child has convulsions, when taken alone, is of no value in making the diagnosis. Of all the children that we are called upon to attend during convulsions, only a small proportion succumb to tubercular meningitis. In a few cases, we do find convulsions during the prodromal period; they are exceedingly rebellious and likely to recur. In these cases, there is no error in diet or other causes than tubercular deposit. In the case above mentioned, there must have been a tubercular deposit, giving rise to the convulsions twelve months before the child died, and almost as many months before the appearance of continuous symptoms. From anatomical appearances of the brains of children who have died before the manifestation of symptoms referable to meningitis, but after convulsions, the tubercular deposit has been found in some at the base, in others upon the convexity of the brain. In the majority of the cases which the writer has studied, convulsions were not present, as a rule, during the prodromal period; and when they were, they were associated with other symptoms which aided in making the diagnosis easy.

7. *Pulse and Fever*.—With regard to pulse and temperature, I do not believe that I can give anything characteristic. In some cases, the pulse is slow, in others irregular, and in another class of cases very rapid. As a rule, the temperature does not run high during the prodromal stage, and when these symptoms which we have considered appear many weeks before the final and continuous illness, the temperature during that time is not

actually above 100° Fahrenheit. There are cases in which, for several days, we find elevation of temperature with all other symptoms of a rapidly fatal tubercular meningitis; suddenly, a decided fall, disappearance of the symptoms, and a return to apparent health. We begin to doubt the correctness of our diagnosis, when suddenly there is a fresh outbreak of all the symptoms, increased in severity, leading to a fatal termination. The end is caused by paralysis of the centers in the medulla oblongata. The appearance of tubercular meningitis *without* prodromal symptoms appears to me to be exceptional. That we do have these cases, I cannot deny, but they are *exceedingly rare*. There are other symptoms than those which have been mentioned that aid us in making up the picture of the disease, but to these I wished to call your attention and invite a careful study of their relative importance. It would be unfortunate, indeed, for us to treat a case of incipient cerebral tuberculosis for simple gastric indigestion; yet this mistake is frequently made. There is not one pathognomonic symptom of the disease under consideration, but we may conclude that the association of several of the symptoms point strongly to the true seat and character of the disease. The eloquent words of Trousseau again occur to me:

"We must not look at a portion of the picture only, but at the whole at once. In order to know the drama well, the whole play must be seen, and not one scene alone."

FORCED RESPIRATION—CASE No. 3.

By GEO. E. FELL, M. D., F. R. M. S.,

Professor of Physiology and Microscopy, Medical Department, Niagara University, etc.,
Buffalo, N. Y.

At the date* of this writing, four lives have been saved by this operation, viz., three in Buffalo by myself, and one in Vienna.

The first case† was that of Mr. P. B., Buffalo. He had taken twenty grains of morphine and some chloral hydrate

* February 15, 1888.

† This case was fully reported in the November (1887) number of this journal.

previously; this was entirely absorbed. The known methods of resuscitation had been tried, and failed. After the pupils had dilated in the last stage of asphyxia, *forced respiration* was resorted to, and the patient is now alive and well.

The second case was cited in the *Lancet* of October 15, 1887. Dr. Länger, of the Vienna Hospital, took an over-dose of morphine or laudanum. An incision was made in the trachea, and the patient's life was saved by *forced respiration*. I have not seen the details of this case. The operation was made after the reports of my first case (read before a section of the Medical Congress at Washington,) had appeared in the medical journals.

The third case, my own, is the subject of this paper.

The fourth case, also brought to a successful termination through my labors, is yet to be reported.

REPORT OF THIRD CASE.

Mr. J. A. V., aged forty-three, a man of family, pleasantly situated, but subject to fits of melancholia and troubled with insomnia, took an over-dose of laudanum* and chloral about 9.00 or 10.00 P. M., Saturday, December 10, 1887. He had previously taken a bath, changed his underwear, and then retired. About midnight, his wife heard him breathing heavily, tried unsuccessfully to arouse him, and sent for a physician.

Dr. Lawrence G. Hanley, of the Emergency Hospital, was the first to respond to the call, and was shortly thereafter followed by Dr. Jacob. The condition of the patient at this time, 1.15 A. M., indicated that a large dose of some powerful narcotic had been taken. Breathing was stertorous; pulse, 128; respirations, six per minute; and pupils contracted. At 1.40 A. M., Saturday morning, I was called. Quickly arriving upon the scene, I found the patient upon the floor of his bed-room; the physicians were employing Sylvester's method of *artificial respiration*. Assuming, at their request, entire charge of the case, I had the patient placed upon a mattress on the dining-room table.

*Two ounces of laudanum were taken, and all retained.

2.20 A. M.—The natural respirations ceased, or would last but a short time without the aid of the *artificial respirations*. Pulse, seventy-two to eighty-four, indicating satisfactory oxygenation of the blood; however, the notes* taken at the time show that the natural respiratory efforts were so irregular and deficient that it was difficult to count them.

The inefficient character of the natural, even when supplemented with the *artificial respirations of Sylvester*, were evidenced by the gradually marked increase of cyanosis. Previous to this, when noticing the first good results of the *artificial respiration* in this case, I informed the physicians that this would be a good time to effectually answer all skeptical "wise-acres" who believed that *artificial respiration* would save life under conditions of *deep narcosis* from poisons which act upon the respiratory centers. I informed those present that if the life of the patient could be saved by *artificial respiration*,† or any other *known* means, my apparatus *should* not be used.

It was evident that the *artificial respirations* were doing little good, growing less and less efficient.

2.30 A. M.—Natural respirations, seven per minute.

2.40 A. M.—Natural respirations, stertorous, twelve per minute; pulse, 120.

2.45 A. M.—Natural respirations, fifteen per minute, but so superficial or "shallow," that little good was effected by them.

FAILURE OF ARTIFICIAL RESPIRATION.

3.25 A. M.—Respirations failed. Owing to evident signs of heart failure, and the uncertainty of its ability to stand the strain to which it was being subjected, it was considered by all the physicians present that the life of the patient demanded the application of *forced respiration*. Time was given to demonstrate beyond question the uselessness of the *artificial respiration*,

*This case is reported from full notes taken during its progress by the different physicians present.

†By *artificial respiration* is understood the various methods ordinarily used, as Sylvester's, Marshall Hall, and others. *Forced respiration* is the name I have given my operation.

until it was feared the patient might succumb before the *forced respirations* could be applied.

3.40 A. M.—Operation of tracheotomy begun. Blood venous; Dr. Hanley remarked, at the time, that it was “ebony-colored.”

FORCED RESPIRATION SUBSTITUTED.

4.05 A. M.—*Forced respirations* begun. In a short time, the pulse became stronger, and was reduced to seventy-eight per minute.

5.30 A. M.—Pulse, 102.

5.45 A. M.—Pulse, sixty-four.

6.25 A. M.—The patient, *up to this time insensible*, opened his eyes, stared in a half-dazed manner, and raised his head from the pillow. He recognized Dr. Goldberg, (by voice only, as afterwards stated,) and, in answer to enquiries, stated that he had taken twenty grains of chloral with some stimulant. This was found to be untrue.

INTERESTING PHYSIOLOGICAL PHENOMENA.

6.45 A. M.—First noted, that when *forced respiration* is discontinued, not the slightest attempt at breathing is made by the patient. This was not produced by a condition of *apnea*, but under the ordinary continuous operation of the apparatus; furthermore, owing to the complete paralyzation of the respiratory centers, this condition prevailed when the face, lips, eyelids, ears and back of neck were in a state of cyanosis; when it would seem that all the tissues of the body would be crying for oxygen, and yet, when the *forced respirations* were *discontinued*, not the least effort would be made toward a respiratory act on the part of the patient. But the most remarkable act in this drama of life was, that under this condition of marked paralysis of the respiratory centers, the patient was *conscious*, and

would respond to ordinary requests, such as drinking when desired to, and also when asked to "*take a long breath*," would evidence the power of the will over the respiratory muscles or centers by responding with a good effort at inspiration. He would, however, immediately subside into his former lethargic state, and make not more than the one voluntary effort at respiration. When the condition of asphyxia had been reached, the respiratory efforts were noted, but immediately subsided when the *forced respiration* was again instituted. I will not make any comments on these phenomena at this time, as I propose to consider them in connection with these three cases in another paper. Many persons, besides the four physicians who were present, observed them.

During the progress of the case, water was frequently swallowed by the patient. In one or two instances, the *forced respirations* were unintentionally kept up when the patient was swallowing; the glottis being opened at this time, water entered the lungs and was subsequently coughed up and passed out of the valve of the apparatus.*

7.00 A. M.—Pulse, ninety-six.

8.15 A. M.—Pulse, 108. It was found that the patient could breathe for himself, but only for a short time, and the *forced respirations* had to be continually kept up.

9.00 A. M.—The trachea tube not being secured tightly in the trachea, permitted quite an amount of blood to pass into the lungs. This gurgled ominously at each inspiration. The loose tube also allowed the air to pass upwards into the mouth, so that the lungs were not thoroughly inflated in the inspirations. With a curved needle encircling the trachea, another ligature was passed and tightened about trachea and tube. The *forced inspirations* following, markedly improved the action of the heart.

As the poison become more completely incorporated with the blood, through absorption in stomach and intestines, the effect of even a short stoppage of the *forced respirations* was indicated in

* This indicates, in part, the value of the application of the apparatus in cases of drowning, and also that it would be objectionable to pass a tube into the larynx by way of the buccal cavity when the elimination of poison is important.

a weaker action of the heart. At one time, the rubber tube connecting the respiratory valve with the trachea tube, became almost completely clogged with clotted blood. It was removed and thoroughly cleaned, as was also the inner tube of the tracheotomy tube a number of times. Digitalis fluid extract, in M. ss. doses, was given a number of times; also atropia, one-eighth grains at one time, and smaller doses also. No dilatation of the pupil took place at this time.

The question of keeping up the *forced respiration* when there seemed to be no prospect of the ultimate recovery of the patient, was *seriously* discussed. At one time, I stopped them for a longer period than usual, thoroughly discouraged and tired. The man was not dead, and we *had to keep it up*.

GIVEN UP TO DIE.

11.30 A. M.—Drank some brandy and water; vomited. As the patient had at this time been given up to die, his family were permitted to see him and “bid him good-bye.”

12.00 M.—Pulse, 117. Grains 1-75 atropia administered hypodermically.

12.10 P. M.—Face cyanosed; efforts to breathe made; twitching of toes; respirations not supplying enough air.

12.40 P. M.—Owing to a solution of atropia being placed on or in the eyes, the pupils gradually dilated.* Pulse, 126.

12.55 P. M.—The patient, who had become unconscious for a short time, regained consciousness, and drank some water. Pulse, after drinking, 168, weak and flickering. After this, more air was administered, and three movements of the bellows used for the inspirations instead of two, as formerly.

† The Rev. Mr. Gracey, of Grace M. E. Church, looked in upon the operation about this time; remarked he could do

* This may not have been judicious, but was done under the positive belief of all physicians present that the patient could not survive.

† Even in Buffalo, where I have been known, I trust, as a truthful man, some physicians have questioned some of the facts stated regarding the first case of *forced respiration*. I introduce these circumstances here to indicate the serious aspect of the case as held by all acquainted in any way with it. The reports of my former case and this one are, so far as the serious condition of the patient is concerned, conservative.

no good there, and held a service of prayer in the adjoining room.

3.20 P. M.—Temperature, 100.5 Fah.

6.00 P. M.—Pulse, 120.

PATIENT BEGINS TO BREATHE FOR HIMSELF.

6.15 P. M.—Respiration, fourteen per minute. Patient began breathing for himself. This lasted fifty-five minutes, when the respirations lowering to eight per minute, *at the request of the patient*, the *forced respirations* were again proceeded with.

9.15 P. M.—Pulse, 120; respirations, fourteen, natural; becoming shallow, they were supplemented with the *forced respirations*.

11.30 P. M.—Pulse, 100.

December 11, 1887, 12 Midnight.—It is now twenty hours since the forced respirations were begun.

1.05 A. M.—Pulse, 128, strong. The patient has been breathing for himself for the last four hours, but has *now requested* that the *forced respirations* be used for a time. Since then, he has breathed for himself. For over fourteen hours, he could not be left to breathe for himself, even for a half-minute, without evident discomfort and danger, viz., between 4.00 A. M., 10th inst., and 6.30 P. M., 10th inst., and for nearly seven hours ; thereafter the *natural* had to be supplemented by the *forced respirations*.

4.00 A. M.—Pulse, 117. Although *oleum tigllii* to *gtt. v.* have been administered, no movement of the bowels have taken place.

Essence of pepsine, beef peptonoids, milk and spirits frumenti given a number of times. Enemata of water, soap and water with oil and stimulants, given also.

CATHETERIZATION.

Every six or eight hours catheter used. Up to 12.30 A. M., 11th inst., nearly twenty-four hours after the patient was first

discovered, and some twenty-seven hours after two ounces of laudanum had been taken, not more than six ounces of urine had been drawn from the patient. This large amount of poison (two ounces) had been undergoing the round of the circulation, producing its maximum effect on the whole system. The left arm was partially paralyzed, the brain congested.

Between 3.00 and 4.00 A. M., 11th inst., bowels moved for the first time. At 7.00 A. M., the patient left the table, without assistance, to use stool. At 9.00 A. M., the tracheotomy tube was removed, wound plugged antiseptically, and patient put to bed.

Although very seriously ill for three or four days following, no serious lung difficulty set in, the patient has fully recovered, and regrets the condition of mind which influenced or controlled him at the time of the deed. Furthermore, he has made up his mind to manfully battle through the rest of life, and deserve the kind consideration of his fellow-men.

APPARATUS USED.

The apparatus used in this case is the modified form described in a former paper (see below); and owing to its admirable practicality, as evidenced in this most extended case, I shall recommend it until further improvements may suggest themselves.

The simplicity of the apparatus will permit it to be used by any one of ordinary intelligence upon proper instruction, and after the tube is inserted into the trachea. A simple bellows, arranged to produce a steady stream of air, and worked by hand or foot-power, is connected with the valve of the apparatus by a rubber tube. The valve connects also with the tube in the neck by another rubber tube, which is easily attached at the trachea end. The surgeon who controls the valve is guided for the time of inspiration, say by two or three movements of the bellows. By this means, over-inflation of the lungs is prevented. Although the apparatus has been used steadily from two and one-half hours in the first case, to twenty and one-half in the last, no serious condition of the lungs has been produced. Marshall Hall's objections to "the use of bellows or any forcing apparatus" falls flat before such testimony.

Electric-motor power, to keep the air-forcing apparatus working, might be substituted for hand-power.

My thanks are due to all physicians, students and laymen who for hours assisted in keeping the life in the body of our patient. To know that our work is gratefully appreciated by the one whose life was saved, is also cause for congratulation to all engaged in the case.

For further information regarding *forced* respiration, see my paper in this journal of November, 1887.

NO. 72 NIAGARA STREET.

[On page 346, third line in last paragraph should read "by Dr. Jacob Goldberg." Dr. Samuel Goldberg was present later in the case.]

HYSTERO-EPILEPSY COMPLICATING PREGNANCY.*

By C. C. FREDERICK, M. D., Assistant in Obstetrics, Niagara University.

MR. PRESIDENT AND GENTLEMEN—I think I cannot more profitably occupy your attention than by reporting to you the history of a case which has occurred in my practice within the past eighteen months, viz.: A case of hystero-epilepsy complicating pregnancy.

These cases are rare. The literature of the subject is meagre—in fact, I have not yet found a single reported case. In my search for literature, I came across a paper on "The Hystero-Neurosis," by Dr. George F. Engleman, of St. Louis, in the transactions of the American Gynecological Society of 1877, wherein he describes cases reported by Drs. Fordyce Barker, Louis Mayer, of Berlin, Edgar Holden, of Newark, N. J., and others, together with those observed by himself. These include hystero-psychoses, hystero-neuroses of the eye, pharynx, stomach and bowels, but do not contain descriptions of hystero-epilepsy complicating pregnancy. Engleman says very few have been described. I have not had access to the writings of Charcot and Richer; therefore, if this be so rare a case, I hope it may prove of interest.

* Read before the Buffalo Medical Club, November 23, 1887.

In September, 1886, I was called to see Mrs. S.; *aet.* thirty-two, married, the mother of three children. She was, at this first visit, suffering from one of her convulsive seizures. After she had recovered from it, I obtained from her and her husband the following history: They had recently removed to this city from a city in the southern part of this state. Two and one-half years before, she had been delivered of her last child, a boy. Her pregnancy progressed as usual, till, about a month previous to her labor, she began to have spells of dyspnœa with faintness. These recurred every few days with increasing severity, till, in about two weeks from their commencement, she had a slight convulsion, during which her arms and legs were cramped with severe pain, but she did not lose consciousness. These continued but a few moments. They continued to recur till after her labor. From that date to the time I saw her, a period of two and one-half years, she had been in excellent health, having had only four or five slight seizures at menstrual periods.

This visit was at the time of an expected menstruation, but she did not menstruate. The convulsion was mild, as above described, and readily yielded to chloroform by inhalation.

On further acquaintance with my patient, I found her to be a sensible, active woman, of an even, sunny disposition, not nervous, of slight build, but plump and well nourished, the last person one would suspect of having a hystero-neurosis. But Engleman says: "The hystero-neuroses are generally found in women who can by no means be called hysterical in the sense in which the word is ordinarily used."

Three weeks elapsed from my first visit before she again had a convulsion, more severe. They continued to recur with increasing severity and persistency, till at several times she had them every day for two, three and four days in succession, the number of seizures numbering as high as fifteen or twenty in the two or three hours during which they continued. After a series of convulsions as above described, she would be greatly fatigued and sleep for long periods. There generally was a period of rest for a week, during which time she would regain

her appetite, and feel well. I noticed that the convulsions took on a more severe and persistent character coincident with quickening.

Now to describe, as nearly as I can, a series of paroxysms: She always knew, several hours before their appearance, that they were near at hand. The prodromes ordinarily began in the afternoon, but the storm seldom broke in its fury till from seven to ten P. M., and then continued for from two to four hours. The superficial veins of the forehead and backs of the hands began to show engorgement, and her head felt full, the eyes dull. Coincident with the fullness, came dyspnœa and a short, sharp, quick heart-stroke, only a few beats faster than normal. The dyspnœa continued to increase till her chest pumped like a bellows, taking frequent deep inspirations with sighing expirations. Then consciousness would be lost and the spasm would come on, affecting sometimes one lateral half of the body, then the other side, or effecting both at once. The extensor muscles were more uniformly contracted, throwing the head back, the arms above the head lashing the pillows, the fingers widely distended and curved toward the dorsum of the hand. The legs were also more frequently extended and the toes drawn toward the dorsum of the foot.

Occasionally, the position of extreme opisthotonos or pleurothotonos was assumed. In opisthotonos she rested upon her forehead and toes, the body arched to the utmost. During the spasm, inspiration would almost cease, the heart-beat being rapid and pulse feeble. In two to three minutes, the spasm would become milder, inspirations more frequent, and the pulse fuller. As the muscular spasm relaxed, that of the left side was the last to yield. A period of a few minutes would intervene till the next spasm. In this interval, breathing was stertorous, unconsciousness complete. There was no conjunctival reflex, and the pupils were dilated. As before stated, she would have fifteen to twenty of these convulsions, extending over a period of from two to four hours.

How did I treat this case, you ask? I began with the bromides and kept them up in the intervals. Fortunately, she nourished well during the week or ten days, when free from the eclampsia.

At the approach of them, I gave large doses of chloral, but they would come on in spite of it. I gave her all I dared. Her urine was at all times normal, except after the spasms, when she passed large quantities, of low specific gravity. I then resorted to morphine hypodermically, before the seizures, in one-quarter grain doses, but they came on, not so severe, however.

I found that one-quarter grain doses of morphia were too small, and gave one-half grain, and by repeating one-half grain every one-half to three-quarters of an hour till the pupils contracted, the convulsions would not continue more than one and one-half to two hours. During the last few attacks, I did not give the morphia till about time for the spasm to begin, and then injected one grain and then one-half grain in one-half to one hour. During the intensity of the spasm, I gave chloroform till the pulse became soft, and then withdrew it. At the approach of each succeeding spasm, the pulse would again become hard, and then I began chloroform with the effect of shortening each spasm. I foresaw that she would not hold out till the end of gestation, but fought through the seventh month in order to give her child a chance of life. It was her desire, if I thought it possible. The last three weeks of the seventh month drew heavily upon her strength, but she bravely held out to the end. She had arrived at a point then when something must be done at once, and the induction of premature labor was the something to be done. I would not go into the details of the case further, were it not for the unusual difficulty that I experienced in exciting the uterus to action. I will, therefore, briefly as possible, write my experience: I dilated the cervix with Ellinger's dilator sufficiently to allow me to introduce the smallest size Barnes bag. In the course of six hours, I had succeeded in opening the cervix to the size of a fifty-cent piece, no uterine contractions were excited, and the cervical tissues were thick, leathery and

resisting. I then introduced the largest size Barnes bag, and holding it in situ by a colpeurynter in the vagina, filled the Barnes bag full. This succeeded in further dilating the cervix slightly, but no pains were excited. About this time, a series of paroxysms came on, and I had to desist from my efforts at premature labor. I was obliged to wait one week before I could begin my efforts again. This time my manipulations were no more successful than before, except that I did excite feeble uterine contractions while the dilators were in the cervix. At this point, I called in Dr. Lothrop, and gave ether and attempted manual dilatation. To attempt to dilate an iron ring, would have been about as easy. I had ruptured the membranes during my attempts at dilatation; the head was at the internal os. By dint of perseverance, a narrow-bladed short forceps was passed through the cervix, the head grasped, and after a half hour of work under ether, the cervix was forced to yield. The child lived a few hours.

The woman made a rapid convalescence, and began to menstruate in one month. The delivery occurred in March, 1887.

At the second, third and fourth menstrual periods, I was called to see her, and found her suffering from the same eclamptic attacks. I learned that, a few days before the period, the usual vascular tension was intensified, and she suffered great distress in her head. The flow continued only for a few hours at a time and scanty. She sometimes menstruated vicariously from the nose, throat, and at one time had pulmonary hemorrhage.

At the fourth period, her convulsions were as severe as any she ever had had, and continued from seven to twelve p. m. I gave her, during that time, two grains of morphia by hypodermic injection.

At the third period, she had partial hemiplegia of the right side, with complete anæsthesia of the same, lasting for about twelve hours.

After the recovery from the fourth period, in July last, I prescribed permanganate of potassium, grains ii, twice daily. At several times during the month, she saw a slight bloody show,

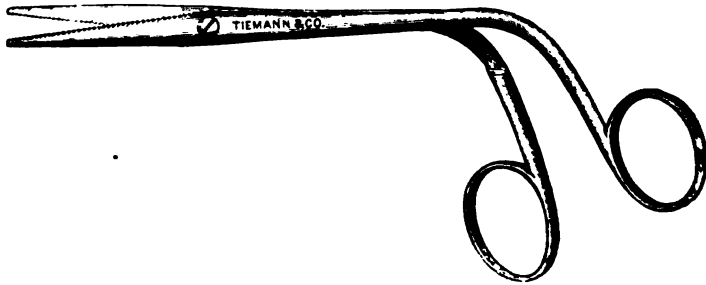
and at the regular period in August she felt fullness of the head which all passed away when the flow began, which continued more profusely than normal for her during four days. She now begins the potassium permanganate one week before the expected period, and goes through her menstruation as one in health, without any hystero-neurosis manifesting itself.

A NASAL SCISSORS.

By FRANK HAMILTON POTTER, M. D.,

Lecturer on Laryngology, Medical Department, Niagara University.

The scissors can be used with great advantage in many operative procedures upon the nasal passages. The cut below illustrates a new form of the instrument, which, it is thought, possesses sufficient merit for publication.



Attention is called to the following points:

1. The hand of the operator is always below the line of vision, whether the instrument is open or shut.
2. The blades are one and five-eighths inches long, and will thus grasp large growths; or, with but a slight movement of the handles, they can be opened sufficiently to trim the edges of wounds. The latter point is well illustrated in the cut.
3. The cutting edges are serrated, so as to make an uneven wound, and thus favor the coagulation of blood.
4. It is strongly made, and thus allows, when necessary, the use of considerable force.

Other scissors have been devised embodying some of the points mentioned above, but it is believed that this instrument has so combined them as to increase the practical value of the scissors in nasal surgery.

It is made by Messrs. Tiemann & Co., of New York, from whom it can be obtained.

42 WEST TUPPER STREET.

Translations.

"COLD" ON THE HEART.

(*Le Rhume du Cœur.*)

By A. LUTON, Professor of Clinical Medicine at Reims.

Translated from *Bulletin Gen. de Therapeutique*, by F. R. CAMPBELL, M. D.

In spite of the strangeness of this title, we desire to retain it, partly to attract attention, but principally because it expresses very accurately the facts which we wish to describe.

There are frequent cases of clogging of the heart, characterized by a dry, fatiguing cough, and often diagnosticated as muco-purulent bronchial catarrh. The complexus of symptoms observed corresponds very closely with our typical coryza, one of the commonest affections in the world, and one, moreover, of which we know too little of the real pathology. The results obtained by treatment confirm our opinion that there is a "coryza of the heart," and justify our invention of a new word.

We are able to support our theory by arguments drawn from analogy. We state nothing new when we recall the fact that the heart's action is closely related to, and dependent upon, the action of other organs, and that the heart has reciprocally an influence upon the functions of other organs. We are all familiar with the co-existence of hypertrophy of the left ventricle and chronic Bright's disease of the kidneys. We speak of the hepatic heart and a cardiac liver, of stomach cough, uterine cough, etc. It is admitted, moreover, that there are continual reciprocal relations between the functions of the heart and lungs. The heart of asthmatics is often hypertrophied. Those who have heart disease are usually subject to dyspnoea. We may, therefore, easily conceive of a cardiac cough.

For four years, we have treated a lady for an extremely severe recurring attacks of acute coryza, accompanied by marked cardiac disturbance. Although there was no organic disease of the heart, there were great dypnoea, marked exaggeration of the præcordial movements, a congestion of the vessels of the neck—in fact, a disturbance of the entire venous system. There was a complete picture of asystole, brought about by an acute coryza dependent upon meteorological influences. In this case, after employing in vain the remedies usually advised in acute bronchial inflammations, we have invariably given almost immediate relief by using granules of digitalin. In two days, after having taken only four granules of Nativelle digitalin, the coryza assumed its usual benign type, all the cardiac symptoms having disappeared.

In other similar cases, we have attained the same remarkable success in treatment, but we were always of the opinion that our cases were exceptional, and that digitalin would only prove of use in a form of the classical acute catarrh of an essentially cardiac type. But an experience of four years has shown that our idea should be generalized.

It is a well-known fact that a simple "cold" is a very difficult affection to treat. What is the fundamental lesion in a simple cold? A tracheitis, or an inflammation of the larger bronchial tubes? It is a catarrh beginning ordinarily in the nasal fossæ, and descending thence to the pharynx, larynx, trachea, and sometimes reaching even to smaller capillary bronchioles. But these anatomical lesions do not explain some of the most prominent symptoms which characterize the disease. There is an evening exacerbation of temperature, there is an incessant dry cough, there is slight dyspnoea with præcordial anxiety. If the patient remains in bed, the symptoms are not at all alleviated.

Sometimes, this simple "cold" persists for weeks, with no tendency to improvement, and we attribute to neglected "colds" a host of affections.

After the acute symptoms subside, a period of relief comes on. Expectoration is abundant and easy; the patient spits continually, the sputa being of a muco-purulent character, and he often fears the approach of phthisis. To this chain of symptoms, more or less alarming, a routine treatment is directed, or the cold is abandoned to chance, and no attention paid to it. There is a virtual confession on the part of the profession that little can be done for these affections.

and the druggists have a wide field for the sale of their nostrums. If a careful study of the nature of a cold should be made by the profession, it would lead to good results.

Coryzas are generally due to a sudden exposure to cold, as is generally admitted by the patients. In some autopsies, certain lesions of the heart are frequently observed: Whitish patches in the visceral pericardium, traces of endocarditis, partial adhesions of the layers of the pericardium, and swelling of the pleura. And notwithstanding the presence of these grave lesions, nothing is remembered in the history of the case which would lead the physician to suspect their presence. From a clinical point of view, to what do these lesions correspond, if not to those of our simple acute coryza? Sometimes, during an attack of coryza, we find indefinite and painful spots in different parts of the chest; sometimes, the pain resembles that of pleurodynia. Do not these pains explain the existence of the thoracic lesions mentioned above; the whitish plaques and the partial adhesions of pericardium and pleura? In connection with these painful spots, there is a præcordial disturbance and a peculiar kind of respiration which persist until expectoration becomes profuse. Yet in this first stage of the disease, auscultation reveals nothing abnormal in bronchial tubes or substance of lung. The condition of the heart at this period is not well known, yet, in many cases, we have been able to detect a dilatation of the left ventricle. It may be thought that this condition of the heart is very difficult to demonstrate, but, by applying the method of "*outlining the heart*," published in *Union Médicale du Nord-Est*, 1887, we can obtain results far more accurate than can be possibly reached by percussion and auscultation. Palpation, however, shows a pulsation stronger than usual, and extending beyond its ordinary limits. Sometimes, at the base a souffle is heard, which may be attributed by some to the fever present at the beginning of the attack. There is, then, a true choking up of the heart, a fact which furnishes the key to the theory which we advance. What takes place in the second stage of coryza we do not think it necessary to record, since it is merely the *denouement* of the scene which we have just described. It is here that the true "cold" begins, that is, the muco-purulent catarrh of the bronchi, after which all becomes more plain, and the condition of the patient greatly improves with the advent of expectoration.

Let us now analyze the treatment to be employed in "colds," that is, of colds accompanied by cardiac plethora and relaxation of the muscular walls of the heart. First, we may stimulate the excretions by employing hot punch, which increases diaphoresis, a practice often followed by good results. The administration of Dover's powder in a warm aromatic infusion, is based upon the same principle. Then we may employ blood-letting, so commonly practiced in the initial stage of fevers in the past, a practice often attended with the best results.

In this same category of remedies, we may place diuretics, purgatives, derivatives, revulsives, etc., all of which are measures calculated to diminish cardiac engorgement and favor contraction of the heart walls when the muscular tone is diminished. We would not advise puncture of the heart, an operation which has several times been practiced (Bruhl, *Progres Med.*, 1887). This operation is only indicated *in extremis*, and even in the worst cases the practice must be dangerous, and attended with only temporary relief.

But the practitioner possesses a powerful weapon for combating this disease in *digitalis*, a true cardiac tonic, which will make him master of the situation.

It is not necessary to enter into any elaborate argument to prove that this is the true therapeutic measure to be adopted in treating our classical "cold" or influenza. Any practitioner has abundant material in his practice to demonstrate the efficacy of this remedy.

Although our first trials were made with Nativelle digitalin, we now prefer preparations of normal digitalis, and especially the tincture of digitalis. In practice, we may combine the tincture of ipecac and opium of the pharmacopœia with our preparation of digitalis; the doses to be used, the time of administration, etc., must be determined by the judgment of the practitioner.

There are now numerous substitutes for digitalis. We may mention, among them, caffeine, sparteine and strophanthine. Caffeine is a remarkable cardiac tonic and diuretic; of sparteine we know but very little; of strophanthine, we know that it acts much like digitalis, arresting, in poisonous doses, the heart in systole. At present, however, we see no occasion for seeking a better remedy than digitalis in the treatment of this affection, called so variously coryzæ, "cold," influenza and acute nasal catarrh.

Miscellany.

DIPHTHERIA.—Dr. Johnson says: I have prescribed, for diphtheria, dilute acetic acid, about one part in ten, or as strong as can be agreeably borne, either as a gargle or with atomizer, and in every instance it has dissolved the exudate so rapidly that it was expectorated without much trouble. I direct that it be used for a period of five minutes, or as long as it can be done without greatly fatiguing the patient, at intervals of four or five hours, or often enough to keep the throat clear, and have no trouble in keeping the membrane from thickening and causing distress by its presence. Another thing: they all say that their throats feel easier and not so dry after using it. Since then I have treated about thirty cases, and, using acetic acid in some form, all have recovered quickly.

THE *American Lancet*, commenting upon the despairing appeal, published in our columns, in behalf of the Buffalo Medical Library Association, very truly says: "Without any positive knowledge of the facts, we venture the opinion that the trouble is not that the physicians do not want a medical library, or that they are unable or unwilling to support one, but because there has not appeared in their midst a leader in this direction. If they find some man like Dr. Jas. R. Chadwick, of Boston, who loved books and has perseverance and tact, he would raise for the library in Buffalo thousands of dollars yearly, and thousands of volumes. Medical libraries do not grow of themselves. Lots of self-sacrificing work is needful in order that they may be established."

A CHINESE REMEDY FOR CROUP.—The formula of Tcheng-Ke-Tang is as follows: "Take from an old well seven big spider-webs, two of which at least should contain living spiders. Mash them up together (the webs and spiders), and add to the mass (or *mess*, we should say,) about two scruples of alum dissolved in as little water as possible. Cook the whole over the fire until dry, and then increase the heat to incineration. The incinerated residue is powdered very

fine, and the powder is blown into the throat with a little bamboo cane. This is a sure cure." In short, the Chinese use burnt alum.
—*St. Louis Medical and Surgical Journal.*

PHARMACEUTICAL SUBSTITUTION.—A short time ago, a German association set itself the task of *proving* that the German pharmacists habitually *substituted* one ingredient for another when not in stock. Bogus prescriptions were, therefore, prepared containing unknown and absurd articles. One prescription read :

Aconit. Nap.
Tuber Cinereum.

Notwithstanding the fact that "Tuber Cinereum" is the "*tubercle of Gray substance at the base of the human brain*," this article with aconite was actually dispensed and paid for in *fifth-eight* Berlin pharmacies. Other fancy ingredients, such as *Urticaria Rubra*, *pemphigus foliaceus*, etc., etc., were dispensed in *seventy-seven* pharmacies ; only twelve refused them. When the hoax was complete, the whole bundle of prescriptions, together with the compounds dispensed, were submitted to the editors of the journals. The organs of German pharmacy admit the truth of the charge. The Berlin Pharmaceutical Society, at their last meeting, *discreetly* resolved to take no notice of the matter. *The boasted superiority of German pharmacists would seem to have received a shock by these revelations.*

TAPE-WORM.—The most successful way to get rid of him is by making him let go with his hooks. You must give him a narcotic remedy. We have one remedy that is the best for the armed worm, "*tænia solium*." Pomegranate, I do not believe, will ever fail, if properly applied. First, clear out the canal. A purgative will not do this. Give remedies that liquefy, such as phosphate of soda, for a few days ; then, an active purge. The sodium phosphate must be given in the intervals of digestion, in decided doses. Then give :

℞—Pomegranate oz. iv.
Aq. font. Oij.
Boil down to Oj, and give largely. —*Bartholow.*

THE thirty-ninth annual session of the American Medical Association will be held in Cincinnati, O., on Tuesday, Wednesday, Thursday and Friday, May 8th, 9th, 10th and 11th, commencing on Tuesday, at 11 A. M. Members desiring to present papers should forward the paper or its title to W. W. Dawson, M. D., Cincinnati, O., Chairman Committee of Arrangements, at least one month before the meeting.

THE past few months have witnessed the deaths of many prominent American medical men, among whom may be mentioned Dr. Asa Gray, the eminent botanist; Dr. Moses Gunn, Professor of Pathology, Rush Medical College; Dr. Alonzo Palmer, Professor of Medicine at Ann Arbor, and Dr. Wesley Carpenter, of New York.

THE University of Pennsylvania gives a course to its medical students on "Medical Dietetics." Nothing can be more important, and the wonder is that medical colleges have neglected it so long.

DR. FORDYCE BARKER says that the most valuable remedy for hemorrhages occurring near or at the climacteric is a combination of equal parts of fluid extracts of hamamelis and hydrastis.

THE *Dietetic Gazette*, formerly the journal of Dietetics, appears in a new and enlarged form. This journal fills one of the few places hitherto vacant in medical periodical literature.

A SINGLE vesication over the fourth and fifth dorsal vertebræ puts an end at once to the sickness of pregnancy for the whole remaining period of gestation.

SIR ANDREW CLARK, of London, said: "I worked twelve years for bread, twelve for butter, and twelve more for the luxuries of life."

A NUMBER of Italian apothecaries, who deserted their posts during the recent cholera epidemic at Naples, have been fined fifty lire each.

OUR grandfathers used to cure the headache by kissing a pretty girl. Some of these old-time remedies are difficult to improve on.

Dr. Andur recommends reserpin (gr. x-xx) for the relief of seasickness.

MEASLES is unusually prevalent in Buffalo at present. There are, however, but few fatal cases.

THE French Canadian physicians of New England have organized a medical association.

BERTI, of Italy, reports a case of organic impotence due to absence of the dorsalis penis artery.

Selections.

TASTELESS PREPARATIONS OF CASCARA SAGRADA (RHAMNUS PURSHIANA).

(Abstract of an article entitled "An Examination of Cascara Sagrada," by H. F. MEIER and J. LEROY WEBBER, published in the *American Journal of Pharmacy*, February, 1888.)

Recent investigation of the constituents of Cascara sagrada has led to the discovery of new principles and facts of great importance pharmaceutically and therapeutically.

The chief objection to Cascara sagrada heretofore has been its inherent bitterness. In the light of recent researches, tasteless preparations of this drug, highly efficacious medicinally, are now to be had.

These discoveries mark a distinct advance in pharmacal attainment and in the therapeutics of chronic constipation, since this remedy can now be much more generally and persistently administered, and its well-known tonic laxative action obtained without the drawbacks which seemed formerly inseparable from its employment.

The facts disclosed concerning this remedy deserve more than a passing notice, especially since they indicate the existence of principles and modes of action extending far beyond the subject indicated,

and are well worth the close attention of the thoughtful and scientific physician. A valuable contribution to the knowledge of the chemical constitution of this drug appeared in the *Amer. Journal of Pharmacy*, for February, 1888, which makes it possible not only to obtain a true interpretation of the various clinical observations, but clears up apparent anomalies, and also indicates the reasons for observed effects, which have lately been disputed, but now admit of no further question or misunderstanding.

Among the discoveries referred to in this valuable paper, of especial interest to the physician, is the influence of a class of vegetable ferments, and their recognition as the causes of various abnormal conditions, such as colic, vomiting, nausea, diarrhoea and dysentery, which occasionally attend the administration of certain drugs.

It appears that Frangula bark, when fresh, contains such a ferment in excessive quantities, and is, therefore, unfit for use until the ferment has exhausted itself—the process usually occupying several years. It also appears that Cascara contains some of this principle, and this fact will account for the occasional untoward effects of the drug, which have been observed as consequent on the employment of a number of its preparations heretofore in the market. These effects are, therefore, not due, as has been supposed, to any idiosyncrasy on the part of the patient, or to the laxative or tonic constituents of the bark itself, but to a distinct objectionable principle, which, once recognized, can be rendered inoperative and harmless.

It has been reserved for Parke, Davis & Co., through their exhaustive investigations, to be the first to clearly recognize the principles involved, and by the application of such intelligent comprehension, to formulate and adopt correct pharmaceutical processes, and thus overcome all the difficulties heretofore existing. As a result of their investigations, they now offer to the medical profession a fluid extract, a solid extract and also a concentration, all of which (designated as "Formula of 1887") exhibit only the desirable laxative and tonic properties, and being free from this ferment, are incapable of producing griping, nausea or any of the mal-effects above enumerated.

It appears that these ferments are distributed through a large number of vegetable substances, being not confined to unripe fruits only, but can also exist in the root, bark, leaf or even in vegetable extracts, of which we have illustrations in various juices, liquid or

insipissated. Of this latter class, aloes will serve for an example. A familiar illustration of an unaltered vegetable would be the cucumber, the green apple (familiar to the school-boy), and unripe fruit generally. In the case of the cucumber, experience has taught the means of removing this ferment by dialysis or osmosis. We sprinkle salt over it or surround it with a strong brine, which provokes an outward flow of the fluid containing the ferment, with the result that the ferment is to a large extent removed, and thus rendered incapable of producing the same conditions in the stomach for which it was intended in the plant; that is, the creation of vegetable acids from other material previously existing, in the same manner that pepsin, likewise an unorganized and soluble ferment, provokes the solution of fibrin and albumen, forming peptone, or, as diastase, is capable of effecting the transformation of starch into soluble glucose and dextrin, both new bodies.

That these ferments all bear a direct quantitative proportion to the results accomplished, has been practically recognized. We are promised a satisfactory indication of the sources of the acids formed in the plant, which will enable us to corroborate the statements that identical processes go on in the stomach when the ferment is permitted to exert its action there.

The physiological tests now being conducted at the laboratory of Parke, Davis & Co., with the different principles contained in the plant, cannot fail to demonstrate finally not only the superiority of Cascara itself, to its former supposed competitor, Frangula, but also its comparative value as a laxative.

To physicians desiring fuller information concerning the discoveries made, a reprint of the article from the *American Journal of Pharmacy*, and a working bulletin descriptive of this drug, will be mailed by Parke, Davis & Co., free on request.

CONCENTRATION OF THE BLOOD AS A CAUSE OF CONVULSIONS.

The eminent Italian physiologist, Ivo Novi, has made a series of carefully-conducted experiments which prove that convulsions are frequently due to an increased specific gravity of the blood. The physiological and therapeutic effects of intravenous injections of

chloride of sodium are already well known. Experiments made by earlier investigators have shown :

1. That the blood preserves its normal sp. gr. or amount of chloride of sodium by retarding or increasing excretion by the kidneys.

2. That a saturated solution of chloride of sodium will produce rigidity of muscles placed therein (Schiff).

3. That by increasing the amount of chloride sodium in the blood by intravenous injection, muscular spasms will be produced, which disappear when the sp. gr. of the blood is again reduced.

Novi has investigated the mode of production of these muscular contractions, endeavoring to determine whether they were the result of the formation of methæmoglobin, which produces the convulsions seen in asphyxia. He finds that methæmoglobin is not produced, but the concentration of the chlorides acts upon the tissues, purely by abstracting water, that is, by its hygroscopic power. He shows that the substance of the brain, especially the cortex, loses from five to six per cent. of its water.

The following is a summary of his conclusions :

1. The intravenous injection of a ten per cent. solution of chloride of sodium produces in all the higher mammals muscular spasms as soon as the sp. gr. of the blood becomes double the normal.

2. It does not produce this effect by converting the hæmoglobin into methæmoglobin, as in the case with the alkaline chlorates in the experiments of Marchand.

3. The peripheral nerves and muscles are not affected in these conditions. The central nervous system is affected, principally, by the abstraction of water from the brain, especially the gray substance of the cortex.

4. It is highly probable that the convulsions, which accompany analogous concentrations of the blood, as in Asiatic cholera, are due to the same cause.—*Lo Sperimentale*.

THE USE OF WATER AT MEALS.

Opinions differ as to the effect of the free ingestion of water at meal times, but the view most generally received is, probably, that it dilutes the gastric juice and so retards digestion. Apart from the fact that a moderate delay in the process is by no means a disadvantage,

as Sir William Roberts has shown in his explanation of the popularity of tea and coffee, it is more than doubtful whether any such effect is in reality produced. When ingested during meals, water may do good by washing out the digested food, and by exposing the undigested part more thoroughly to the action of the digestive ferments. Pepsin is a catalytic body, and a given quantity will work almost indefinitely, provided the peptones are removed as they are formed. The good effect of water drunk freely before meals has, however, another beneficial result—it washes away the mucus which is secreted by the mucous membrane during the intervals of repose, and favors peristalsis of the whole alimentary tract. The membrane thus cleansed is in a much better condition to receive food and convert it into soluble compounds. The accumulation of mucus is specially well marked in the morning, when the gastric walls are covered with a thick, tenacious layer. Food entering the stomach at this time will become covered with this tenacious coating, which, for a time, protects it from the action of the gastric ferments, and so retards digestion. The tubular contracted stomach, with its puckered mucous lining and viscid contents, a normal condition in the morning before breakfast, is not suitable to receive food. Exercise, before partaking of a meal, stimulates the circulation of the blood and facilitates the flow of blood through the vessels. A glass of water washes out the mucus, partially distends the stomach, wakes up peristalsis, and prepares the alimentary canal for the morning meal. Observation has shown that non-irritating liquids pass directly through the “tubular” stomach, and even if food be present, they only mix with it to a slight extent. According to Dr. Leuf, who has made this subject a special study, cold water should be given to persons who have sufficient vitality to react, and hot water to the others. In chronic gastric catarrh, it is extremely beneficial to drink warm or hot water before meals, and salt is said, in most cases, to add to the good effect produced.—*British Medical Journal*.

THE ETIOLOGY OF ACUTE ENDOCARDITIS.

Medical News, October 1, 1887: We have already referred to the observations of Orth, Philipowicz, Prudden and others, which demonstrate the constant associations of micro-organisms with the lesions of ulcerative endocarditis, and the possibility of the artificial

production of the disease in animals with or without previous laceration of the valves. A number of forms have been cultivated, chiefly cocci, but, in one or two cases, small bacilli, and in two instances in which the endocarditis complicated pneumonia, the same kind of organisms were found in the lung and on the heart-valves.

Weichselbaum has recently studied the question with great care, and has given his results in the *Centralblatt für Bacteriologie und Parasitenkunde*, Bd. ii., No. 8. Cultures were made from fourteen cases of ulcerative endocarditis as soon as possible after death; in some instances, within an hour or two. In twelve, microbes were present; in six cases, the streptococcus pyogenes; in three, the pneumonia diplococcus; and in three, less common but equally distinctive forms. In the two negative cases, the vegetations were old and calcified. The experimental work confirms the results of previous observers regarding the feasibility of inducing artificial endocarditis.

A much-debated point, upon which we need further observations, is whether, in the ordinary verrucose, endocarditis micro-organisms are present in the vegetations. Klebs, Koster and Ziegler regard this form as also bacteritic, but Osler, Orth and others have failed to demonstrate their presence. Recently, E. Frankel and Sänger in *Virchow's Archiv*, Bd. 108, have found organisms in nine out of fourteen cases, and have shown that the colonies may be so scanty that the culture method gives much more definite results than can be obtained by section and staining. In two instances, however, Weichselbaum could not find them, and suggests, in explanation, that the vegetation may have been old and the organisms dead. More extended observations are required before we can attribute every case of warty endocarditis to the irritation of microbes on the valves.

ON THE ANTITHERMIC, ACETANILIDE, AS A NERVE SEDATIVE.

Dujardin-Beaumetz, in *L'Abeille Medicale*, discusses in an interesting manner some of the therapeutic uses of acetanilide as an analgesic, and claims that it is to be placed in one group with antipyrine and phenol as analgesiacs and antipyretics.

In acetanilide, and in the new alkaloid, antipyrine, it was the antipyretic action that first attracted attention. The former is called by physicians antifebrine. Soon it was discovered that these new drugs

could be employed therapeutically for other purposes than to combat pyrexia ; and Dujardin-Beaumetz has demonstrated that acetanilide is particularly efficacious against the shooting pains of locomotor ataxia, those produced by compression of the nerves or cord, those which accompany neuritis of the optic nerve, *et cetera*.

The dose in certain cases has been three grammes ; but ordinarily one and a-half or two grammes has been administered in one day, given in one-half gramme doses. In a few cases, it produced cyanosis and chilliness, but no danger ever followed its exhibition.

Salol, which a pupil of Dujardin-Beaumetz had carefully studied, also acted as a nerve sedative, as was distinctly proven in tabes, rheumatism and other cases. It has scarcely any toxic properties at all, and can be given in doses of four to eight grammes daily.

Antipyrine is more serviceable in neuralgia, migraine and headache, while antifebrine acts better in tabes dorsalis, optic neuritis, etc.

A NEW TREATMENT FOR BURNS AND FROST-BITES.

In *Monde de la Science et de l'Industrie*, Buboff treated successfully sixty cases of burns and frost-bites by his method, which consists in the application of compresses of cotton or linen moistened in a solution of permanganate of potassium. The strength of the solution is from one to three grains to an ounce of water. The remedy is only efficacious in frost-bites of the first or the second degree, and in burns of the first degree.

In every case, the pain rapidly subsided, and the inflammation was relieved ; when the blisters were unruptured, suppuration was always prevented. The doctor cites the case of a patient who was burned over nearly the whole surface of the trunk while taking a vapor bath ; the permanganate solution relieved the pain in an hour ; the epidermis exfoliated, and recovery was complete at the end of a week.

A RECENT REMEDY FOR PHTHISIS.—It having been observed that those exposed, in the manufacture of hydrofluoric acid (H. F.), to its fumes, were greatly relieved of phthisical symptoms, Garcin began to experiment with this acid. In a year, he has treated 100 tuberculous patients, of which thirty-five were cured, forty-one benefited, and only ten died. The method of treatment is simple. The patient is

placed each day in a room containing six cubic metres of air saturated with hydrofluoric gas obtained by passing a current of air, by means of a pump, through a bottle containing 300 grams of distilled water, and 100 grams of hydro-fluoric acid. For a patient in early phthisis, twenty litres of gas to a cubic metre is employed; but in advanced cases, only ten litres should be used.—*Rev. Sc.*

LAVAGE IN CHILDREN.—Loey, in *Prog. Med.*, reports success in the employment of lavage in the case of nineteen infants from one to sixteen months old, troubled with dyspepsia. The stomach was first evacuated, then warm water, containing a small amount of salt, was introduced until it returned perfectly clear. Relief was frequently instantaneous. The operation repeated a few times daily or at intervals, suffices for recovery.

Editorial.

BUFFALO STATE ASYLUM FOR THE INSANE.

We are in receipt of the seventeenth annual report of this institution, although it is but the seventh since the Asylum was opened for the reception of patients. The managers state that the institution is in excellent financial condition, and that in the medical treatment, and in provisions for the comfort and care of patients, the Asylum has kept abreast with the advances in similar institutions, both in this country and abroad. This is certainly mild praise, for few institutions have that provision for comfort that this Asylum affords, and in the medical treatment, Superintendent Andrews and his corps have not only kept abreast with medical progress of the age, but have furnished much for the advancement of this special practice. They further report that the past year has been prolific in attacks upon asylums and their management. The public press has devoted columns to the sensational recital of alleged abuses, and charged serious crimes against the authorities and employees of institutions for the insane. In

some cases, the occasion has been found in the accidents incident to the care of violent and dangerous lunatics. This Asylum has been subjected to a most unjust attack, based upon a death which occurred within its walls. The case is well known to our readers, and we need only to congratulate the Asylum and the accused attendants on their complete vindication. Although the Asylum brought the attention of the authorities to this accident, and asked for a judicial inquiry, the final attitude of certain daily papers in this vicinity made it appear that the whole management of the institution was under investigation. Our congratulations are, therefore, *apropos* on the vindication of the Asylum management, for it was shown to be complete in all its details.

The Superintendent's report contains many interesting facts. The statistics of admission and discharge for the seven years since the Asylum was opened, are as follows :

There have been admitted 1,969 patients, and 1,613 discharged ; of these, 815 were recovered and improved, showing that fifty per cent. were benefited by treatment. By taking out the deaths and those discharged as not insane, mostly inebriates, the percentage is raised to more than sixty-one. These figures must be most gratifying to the medical staff, and are a source of just pride and pleasure to the physicians in the community who send patients to the institution. Many times physicians see the urgent necessity of sending patients to an asylum, but the friends object, as it seems to them but a place for safe care and keeping, but when we are able to hold up to them the prospect of recovery in so great a per cent. of cases as this, we certainly can do so with a clear and definite idea of our duty in the matter, and with a prospect of the endorsement of the patient himself when restored to reason.

The next point in the report is the small number admitted for the second time. Out of 297, but thirty-five were admitted during the second attack, five during the third, and two during the fourth. The condition in which they were received is also very interesting. The addition of a statement concerning these individual cases after treatment would have proved instructive.

Forty-three of those admitted were emaciated and feeble, eleven had heart disease in some of its various forms, nine had paralysis, three had fracture of skull, one, fracture of a rib, eight had bruises, cut throats, or other evidences of suicidal attempts, one was deaf and dumb, one had chorea, two had lost an eye, one an arm, four had acute meningitis, one had rickets, one, ovarian tumor, and one, heart disease, locomotor-ataxia and paraplegia.

Of the 318 patients admitted, 119 manifested suicidal or homicidal tendencies. There were admitted during the year 318, and discharged, 360. This is certainly very encouraging, and indicates that none are detained beyond the proper time.

ARTIFICIAL RESPIRATION—FELL'S METHOD.

In this number of the JOURNAL, Dr. Fell reports the second case of narcotic poisoning treated by forced respiration. Subsequent to that, he has had a third and most interesting case, the details of which have been reported in the daily papers. This last operation was one in which publicity could not be avoided, and we were pleased to note the handsome treatment Dr. Fell received from the secular press. With effusive praise and excusable ignorance, however, some of the editors would rank Dr. Fell with Lister, McDowell and Pasteur, and the medical press has been criticized that it has not joined in the glorification of the Doctor.

To the medical man, however, artificial respiration, employed in cases of poisoning, drowning, etc., is no new thing. The opening of the trachea, and compelling respiration by means of the bellows, is a familiar operation to most medical students. The application to man, of this forced respiration, in those cases in which the nervous energy of the respiratory center is approaching exhaustion, is, we believe, original with Dr. Fell.

If experience proves that this expedient is really a valuable one, and an addition to the means of saving life which the profession has not hitherto utilized, then we will most heartily congratulate the Doctor on having achieved a place with those who

have added something to the common store of medical knowledge. Few, indeed, in the present advanced stage of medical science, are so fortunate as to gain this great distinction.

The actual value of new methods of treatment can never be at once appraised, and the profession is notably conservative in receiving such additions; at first, they are apt to be magnified by the halo of novelty and the enthusiasm of the ignorant; possibly, a real discovery may, for a time, seem to be ignored, but the reward never fails to come to him who is worthy of it.

It is with extreme regret that we learn that Dr. Fell has patented the instruments and appliances used by him in his operations. By this act, he has allied himself with those in the profession, of mercenary instincts, who, having happened upon some new means of benefiting humankind, would sell that knowledge to the highest bidder, or would conceal it from others, unless for a pecuniary consideration. In doing this, they violate a law stronger than any printed code, a law which we hold by inheritance, and which has ever been upheld by the faithful physician. It carries with it a sense of common rights, of common knowledge, of joint relationship, of unselfish devotion to the welfare of the profession and humanity, of faithful performance of duty, regardless of pecuniary reward.

The laity may sneer at our ethics and deride our unbusiness-like methods, but this unwritten code stands as a mute guardian to the community. Because of it, our profession recoils from mean ways, loathes trickery, and shrinks from charlatanism in all its forms. A physician may ignore it, he may worship Mammon, he may accumulate riches—he may even become a congressman—but can all this compensate him for the feeling that he is despised of his brethren; “tumbled down from the top of honor to disgrace’s feet”?

THE WATERS OF NEW YORK HARBOR.

Dr. J. J. Kinyoun, Assistant Surgeon United States Marine Hospital Service, has recently made a careful examination of the waters of New York harbor, showing conclusively that the germs

of cholera and many other infectious diseases are capable of living and multiplying indefinitely therein.

The cities discharging sewage into New York bay have a population of 3,000,000 people. Specimens were obtained at the incoming tide from the Narrows, from the side of the steamship *Britannia* lying in quarantine, from near Hoffman's island and Swinburne island. A chemical examination demonstrated that the amount of organic impurity was very great, and about the same in each of these samples. The samples were collected in sterilized flasks; and in order to ascertain the nature of the bacteria contained therein, and determine how long they would support life of the different micro-organisms, the following experiments were made:

"Plate cultivations were made from each of the different specimens, and, at the end of five days, had developed colonies of bacteria. Examination showing the number of micro-organisms:

"Narrows, 4,500 to cubic centimeter; *Britannia* anchorage, 10,200 to cubic centimeter; Hoffman island, 9,600 to cubic centimeter; Swinburne island, 11,700 to cubic centimeter.

"The micro-organisms found in each were several varieties of micrococci and one of a large bacillus. These were transferred to cultivation-tubes for further observation. On November 12th, test-tubes, partly filled with sea-water, were thoroughly sterilized and inoculated in the usual manner, with pure cultivations of the spirilla of Asiatic cholera, and also of Finkler and Prior. Cultivation-tubes were inoculated from the water from day to day, for the purpose of determining the longevity of the growths. During the first five days, the water seemed to exert a slight inhibitory influence over their development. It was further observed that until January 20th, a period of sixty-nine days, the characteristic growth of the spirillum of cholera *Asiatica* could be produced in peptone gelatine. That of Finkler and Prior has a yet longer lease of life.

"Examinations made from time to time, both by the plate method and direct staining, show conclusively that these spirilla have not only been kept alive, but have also greatly increased in numbers.

"After closely studying the currents of the upper bay, I am led to believe that if dejecta from cholera patients should be thrown into the lower bay, cholera could gain a foothold on the contiguous shores, where every condition favorable to its development and propagation sometimes exists."

This report of Dr. Kinyoun, which appears to have been based upon thoroughly scientific methods of investigation, is not very reassuring to those who have hoped that this country would escape Asiatic cholera, which has already passed through southern Europe, appeared on both shores of South America, and has been arrested in New York harbor by the vigilance of our quarantine officers. If, as many believe, Asiatic cholera is propagated by means of micro-organisms, then it is not only possible, but even probable, that this dread pestilence is now nursing its strength in the waters of New York bay, only to break out upon the surrounding cities as soon as the hot weather appears, enabling it to make its usual inland journeys.

A CORRESPONDENT asks the *Medical and Surgical Reporter* for the proper pronunciation of *itis* in gastritis, hepatitis, etc., and the editor replies that either *eyetis* or *etis* is correct, depending upon the system of Latin pronunciation adopted by the speaker. As 999 medical men out of every 1,000 pronounce the technical terms of their profession according to English methods, they should, in order to be consistent, say *eyetis*. If you adopt the Roman or Continental methods of pronunciation, you may call *bronchitis*, *bron-keetis*, but you should, in that case, also pronounce *vaginitis*, *wah-ghe-nectis*, *femur*, *famoor*, and *caccitis*, *kykeetis*, etc. A few years ago, a teacher of anatomy in one of our eastern colleges attempted to apply his so-called Roman method of pronunciation to anatomical words, but only succeeded in making himself extremely ridiculous. We should look upon our technical words, borrowed or manufactured from the classical languages, as English words, and give them an English sound, since we know very little about the ancient pronunciation of Latin and Greek. Every nation in

Europe, except the English, pronounces Latin according to the sounds of the letters in its own language. The French would call Cicero, *seesaro*; the Spanish, *thecharo*; the Italians, *chicharo*; the Germans, *tsitsaro*. Why then should the English, of all the civilized nations using Latin, give words borrowed from this language a foreign sound, or attempt to restore a pronunciation of which they know nothing? We, therefore, advise our readers to pronounce Latin according to English methods, and give the *i* of *itis* its long English sound, thus maintaining a consistent system of ortho:py.

THE profession has again been placed under obligations by that reliable and enterprising firm of Philadelphia, Messrs. John Wyeth & Brother. We desire to call attention to the advertisement of their compressed tablet triturates in this issue of our journal. This series of preparations has excited a good deal of attention lately, as the triturates combine so many advantages, are so convenient, so accurate, and those made by this house are prepared with such exactness and beauty of finish, as to commend them to every practitioner. For convenience in prescribing very potent and poisonous drugs, they are invaluable. Their ready solubility and the many admirable combinations embraced in their list, have already made them essential to thousands of our best medical men. We think every physician will read their circular with interest and profit. Their list embraces almost every drug possible to be manufactured in the form of triturates, and the claims made for their therapeutic value are so well founded and confirmed by experience and actual results, no one at all familiar with them can ignore their worth and great importance in our armamentarium. The Messrs. Wyeth will gladly send samples and circular matter to any of our friends who will advise them.

THE WILLIAM F. JENKS MEMORIAL PRIZE.—The first triennial prize, of \$250, under the Deed of Trust of Mrs. William F. Jenks, will be awarded to the author of the best essay on "The

Diagnosis and Treatment of Extra-uterine Pregnancy." The prize is open for competition to the whole world, but the essay must be the production of a single person. The essay, which must be written in the English language, or, if in foreign language, accompanied by an English translation, should be sent to the College of Physicians of Philadelphia, Penn., U. S. A., addressed to Ellwood Wilson, M. D., Chairman of the William F. Jenks Prize Committee, before January 1, 1889. Each essay must be distinguished by a motto, and accompanied by a sealed envelope bearing the same motto, and containing the name and address of the writer. No envelope will be opened except that which accompanies the successful essay. The committee will return the unsuccessful essays if reclaimed by their respective writers, or their agents, within one year. The committee reserves the right to make no award if no essay submitted is considered worthy of the prize.

SURGERY.—The *Annals of Surgery*, the only English journal published devoted exclusively to surgery, enters now upon its fourth year. Drs. L. S. Pilcher, of Brooklyn, N. Y., and C. B. Keetley, of London, Eng., are the chief editors, assisted by most all the able surgeons of this country as well as Europe, which is sufficient guarantee of the literary merits. We bespeak for it the co-operation of the members of the profession who are interested in progressive surgery. J. H. Chambers & Co., St. Louis, Mo., are the publishers, and deserve great credit for undertaking to produce such an important journal as *Annals*, and for its artistic execution.

THE annual meeting of the New York State Medical Society, held at Albany, February 7th, 8th and 9th, was largely attended. Many of the papers presented were of exceptional interest, and several of them will appear in later numbers of the JOURNAL. The following were elected officers for the ensuing year: President—Dr. S. B. Ward, of Albany; Vice-President—Dr. A. W. Suiter, of Herkimer; Treasurer—Dr. C. H. Porter, of Albany; Secretary—Dr. Wm. Manlius Smith, of Syracuse.

PROMOTING THE CAUSE OF HIGHER MEDICAL EDUCATION.—California has followed other states in refusing to recognize medical diplomas issued by colleges requiring attendance at only two courses of lectures before graduation. The following is the text of the resolution adopted: "On and after April 1, 1891, the Board of Examiners of the Medical Society of the State of California will not grant certificates to practice medicine on diplomas, issued after that date, by colleges which do not require that all candidates for graduation shall have studied not less than three full years, and shall have attended not less than three full regular courses of lectures during three separate years."

WE call attention to the advertisement, in another column, of "The Language of Medicine," by our associate, Dr. F. R. Campbell. This is the only work in the English language dealing exclusively with the history, etymology and pronunciation of the technical terms employed in medical literature, and will consequently be of great interest to a large portion of the profession. The author's knowledge of the ancient and modern languages renders him eminently fitted for the composition of such a work, and we prophesy an extensive sale.

Two deaths have occurred during the past month in the profession of this city: Dr. J. E. King, an old and respected practitioner of forty years' standing, died suddenly, February 1st, and Dr. Chas. G. Steele, Secretary of the Buffalo Medical and Surgical Association, died of peritonitis, February 11th. Dr. Steele was but twenty-seven years of age, and had just entered upon the practice of his profession.

Book Reviews.

Rules of Aseptic and Antiseptic Surgery—A Practical Treatise for the Use of Students and the General Practitioner. By ARPAD G. GERSTER, M. D., Professor of Surgery at the New York Polyclinic; Visiting Surgeon to Mt. Sinai Hospital and the German Hospital, New York. Illustrated with 248 engravings and three chromo-lithographic plates. New York: D. Appleton & Co. 1888.

This is as beautiful a specimen of the book-makers' art as we have seen. By the photo-typographic process, 248 photographs have been reproduced to illustrate the text; and for the proper presentation of these, the publishers have printed the entire work upon highly-calendered paper, so thick as to resemble card-board. The typography and mechanical work is as near perfection as can be attained. We congratulate Dr. Gerster that his work has been issued by the Appletons—for the author's work commands the highest commendation, and deserves a perfect presentation. This work does not pretend to be a systematic treatise on surgery, but its object is a systematic yet practical presentation of the Listerian principle that has revolutionized surgery within the last fifteen years. Nelaton was in the habit of saying that the man who discovered a method of preventing purulent infection would deserve to have erected in his honor a statue of gold. To-day, it is a definitely-settled scientific fact that suppuration cannot be caused by chemical irritants. Where pus is, these micro-organisms have been at work; or, in other words, without the action of living bacteria, there can be no suppuration. From this it follows, as a necessary sequence, that, with our present knowledge of the principle of asepticism, the infection and suppuration of a fresh wound are due to faults of omission or commission on the part of the surgeon. We frequently hear the statement that the principle of Listerism is simply cleanliness; but ordinary cleanliness is not asepsis. What chemical purity is to the chemist, and sterilization to the bacteriologist, so is surgical cleanliness or antiseptis to the surgeon, and this kind of cleanliness can only be reached through scientific antiseptis. Listerism is, however, to many a chaos of seemingly contradictory and incomprehensible details; its rules varied by the whims of this or that teacher.

To these, and indeed to all surgeons, this book is valuable, because it gives the practical directions of an adept, and because it is largely a record of personal experience. The beauty and abundance of the illustrations—which are photographs taken during operation—add greatly to the practical value of the work. In a word, it is a book which every physician who does any surgical work ought to have.

Photographic Illustrations of Skin Diseases. Forty-eight quarto plates (seventy-six photographic cases from life), accurately colored by hand. An Atlas and Text-Book, 208 pages. By DR. GEO. H. FOX, Professor Diseases of the Skin, College of Physicians and Surgeons, New York. In twelve numbers, \$2.00 each. Complete in one volume. Half roan, \$26.75. E. B. Treat, publisher, 771 Broadway, New York.

The first edition of this admirable work, issued eight years ago, was received by the profession and medical press with the highest encomiums. Its value and merits were not only appreciated at home, but also to such an extent abroad that an edition in French was issued by J. B. Bailliere & Son, of Paris, and an edition in German, arranged for by Messrs. F. C. W. Vogel & Co., of Leipsic. We are heartily glad to welcome the appearance of a second edition, which is not only revised, but made doubly valuable by the substitution of perfect plates for those few which, in the first edition, were open to criticism; the addition of a large number of new ones, and a notable enlargement of the text, so that this edition is an atlas and text-book combined, and covers the whole subject from Acne to Zoster. We cannot too highly recommend this beautiful work.

Doctor and Patent. By S. WEIR MITCHELL, M. D., LL. D., Harv., Member of the U. S. National Academy of Science, etc. Pp. 177. J. B. Lippincott Company, publishers.

There are few men in the medical profession with talents more versatile than those of the distinguished author of this book. As a medical writer, he is highly instructive; as a lecturer, all admire his genius and clear didactic discourse; as a novelist, he has charmed many a reader, and as a teacher of popular medicine, he has few equals. To this last class of writings the present work belongs, and although it was our first intention merely to skim through it, so entertaining and

instructive did we find the book, that the entire work was read. Not only will intelligent patients, for whom the work was intended, be interested in these lectures, but medical men will obtain from it many valuable hints for the treatment of their patients.

Practical Lessons in Fever Nursing. By J. C. WILSON, A. M., M. D., author of "A Treatise on Continued Fever." Visiting Physician to the Philadelphia Hospital, etc., etc. Pp. 208. J. B. Lippincott Company, publishers.

We look upon this as the most valuable of a series of textbooks on nursing published by this firm. The work is thoroughly scientific, and not so loaded down with technicalities and hypotheses but that any nurse of ordinary education can comprehend all of the instructions given. The book should be in the hands of everyone intending to adopt nursing as a profession, while medical men should read it carefully, lest the nurse should know more about this important subject than the practitioner himself.

Contributions to the Study of the Heart and Lungs. By JAMES R. LEAMING, M. D., Emeritus Professor of Diseases of the Chest and Physical Diagnosis, in the New York Polyclinic, etc. Pp. 300; Svo. New York: E. B. Treat. 1887.

This work is composed of a number of monographs which the author has published at different times in medical journals and in medical society transactions. Those who are already familiar with Dr. Leaming's excellent methods of teaching, will highly value this collection of essays on his favorite subjects, while all physicians desiring to learn the peculiar views of the author will find no better method than by the perusal of this book. The publishers deserve special mention for the excellence of the typographical work.

Physiological Action of Medicines. By LOUIS STARR, M. D., JAMES B. WALKER, M. D., and W. M. POWELL, M. D. Third edition. Enlarged. P. Blakiston, Son & Co.: Philadelphia.

This little book contains an outline of the action of some of the most important drugs, and is intended to be an epitome to assist the medical student in the study of pharmacology. The work would be of but little value, except in colleges, where the classification given by the authors is adopted.



VOL. XXVII.

APRIL, 1888.

No. 9

Original Communications.

PERI-NEPHRITIC ABSCESS.

By W. H. HEATH, M. D.,

Surgeon to the Sisters of Charity Hospital, Buffalo.

The cellulo-adipose tissue in which the kidney is imbedded is occasionally the seat of inflammation and suppuration. It is rather an uncommon affection, often difficult of recognition and generally dangerous. Depending on their mode of origin, these abscesses are arranged in three groups, viz.:

Primary.—Those arising independent of disease of the kidney or other organ. These sometimes follow exposure, but are most frequently caused by traumatism, strains, particularly while in a stooping position, and especially in persons in whom there appears a predisposition to suppuration, as evinced by slow healing of wounds, eruption of boils, whitlow, etc.

Secondary.—Those consecutive to disease of the kidney. In general, all suppurative inflammations of kidney or pelvis, if continued, are very likely to set up inflammation and abscess by extension, while extravasations of urine or pus are certain to.

The third class are those due to extension from other parts, as from carious vertebræ and, in females, from pelvic cellulitis.

Chronic inflammations and operations upon the lower urinary organs are particularly liable to be followed by this abscess, and the possibility of its existence should be considered in all obscure cases or complications of disease or injury in this region.

Clinically, they may be arranged in three groups. The *acute*, having a rapid onset course and pus-formation, and which are ushered in with the usual constitutional evidence of severe inflammatory injury and, locally, by pain, swelling in the affected loin; the *sub-acute*, or *chronic*, characterized by a slow, indolent, subtle course; and, thirdly, those cases where the symptoms are masked by the disease they are consecutive to, and, therefore, will not be considered.

The general symptoms vary in degree as in other phlegmons. In acute cases, rigors or chill, high temperature, derangement of secretions, etc., accompany local symptoms of proportionate severity, and the diagnosis is not different. In *sub-acute* or chronic cases, however, until suppuration occurs, and even subsequently, the constitutional evidence may be simply a fever of so varying a grade and character as to lead to the suspicion of enteric or malarial difficulty, or a condition may exist merely of a general wasting and weakness—progressive loss of health—the local evidence of serious organic trouble in the loin being so slight or vague as to attract little or no attention.

The local symptoms are those usual to deep suppurations, modified, however, by anatomical peculiarities and the severity of the cases.

Pain, the most important of all symptoms, is almost always present in some degree—in acute cases, is intense; in sub-acute, may be slight, or disappear and return—and is characterized by being reflected over the ilio-lumbar nerves, to the groin, scrotum, penis, leg, knee or hip, etc. It is, of course, aggravated by movement, and peculiarly by defecation, in consequence of the proximity of the colon to the inflamed area and the particular muscular action called for.

Swelling is preceded by tenderness and sense of tension, and consists more in an obliteration of the flank than the formation

of a distinct tumor. Redness is only present late, when the overlying tissues are involved, and fluctuation is difficult to obtain. Lameness, from contraction of the psoas, and lateral inclination of the body are frequently early and important symptoms. This flexion of the thigh is rather characteristic, and, when early, is due to reflex irritation, later, to infiltration and inflammation of muscle. Constipation is almost always present, for the reasons stated.

In consequence of the reciprocal action between the upper and lower urinary organs, frequent micturition occurs and may exist from the beginning. The pus often has a fecal stench, from proximity to the bowels, and varies from an ounce to many pints. When it contains urine, is evidence of the secondary nature of the malady. The urine itself furnishes important evidence of antecedent renal trouble.

The dangers and complications of the disease arise from wandering of pus, in seeking its own way out, and which it does in accordance with strict anatomical rules. The kidney, which normally floats to a certain extent, becomes fixed—set as it were—from inflammation, effusion and pressure of the pus. Depending, therefore, upon the relation of the pus sac and point of fixation, it may burst into any of the adjacent organs, or, by following the ramifications of the cellular tissue back of peritoneum, make its way to the pelvis, and finally appear in Scarpa's triangle. Cases are recorded of pus finding an exit by opening into the colon, vagina, bladder, stomach, lungs, pleura and into pelvis of kidney itself. Penetration into lung is the most frequent complication, and certainly the most insidious and dangerous, except into the peritoneum, which, however, as these abscesses are generally posterior to the kidney and also the colon, is rare. When opening external—which is the most favorable course—it follows the connective tissue between the latissimus dorsi and external oblique, beyond the quadratus, in the position occupied by lumbar hernia.

Such complications are not invariably fatal, and are characterized by symptoms which invite attention to the region

invaded, and by coincident diminution of local pain and swelling. Thus, when bursting into the colon, pus is found in the stools; into the stomach, it is vomited; when into the lung, dyspnoea, suffocation and copious purulent expectoration ensue; if into the pleural cavity, physical signs of empyema develop.

The following cases illustrate the salient features:

1. J. B.; saltwater seaman; twenty-six years. No particular family history. Had syphilis and gonorrhoea. Admitted to hospital with a fistulous opening in left loin, discharging three or four ounces of pus daily, and which he stated was "where the doctor in the West Indies had opened a large gathering a short time before his return to America." He stated, further, that he had "had a hard time with his back" previous to the gathering, the character of which could not be exactly determined from his remarks.

He gave no history of renal calculi or any inflammatory disease of the kidney; his urine was normal, and none escaped through the sinus, nor could he specify any particular injury to his back, but considered his trouble the result of hard work on long voyages. His other symptoms were lameness and stiffness in left leg, inability to lay on same side or sit upright, poor appetite, diarrhoea, alternating with constipation, emaciation, etc.

He was placed upon good food and tonics, the sinus enlarged, scraped, the abscess cavity drained and washed daily. Exploration failed to detect anything abnormal with the kidney, necrosed vertebræ, or foreign body. After a slight improvement in his general condition, he became worse. Fever developed, followed by pain, swelling and tenderness in right loin, which was opened, drained and washed. It was soon discovered that both abscesses communicated, and his condition steadily ran down. Shortly before he passed out of my hands, gastric and intestinal derangement became more marked, with bronzing, first, of skin over loins, and gradually of face, mucous membrane of mouth and other parts, showing implication of the supra-renal bodies. Neither fistulæ had healed, and his death was a question of but a few weeks.

2. Michael Boyle; thirty-six; seaman. Family history not considered. Habits bad. Admitted for gonorrhoea and cystitis, with a urethra already the seat of old and bad stricture in membranous portion. He complained also of backache, which he attributed to a fall received

in a drunken row some time—eight weeks—previous. Urine was ammoniacal, contained mucus and pus in considerable quantity. He was a little feverish, looked sick, and walked stiff and lame, in consequence, as he said, of rheumatism. His treatment was directed solely to subduing the urethritis and cystitis, the possibility of lumbar abscess not being thought of at the time, that class of hard-laboring and dissipated men so often complaining of their backs. After some improvement in his local disease, his stricture was attacked by gradual dilatation, and the bladder by irrigation, with benefit, without, however, freeing or even diminishing the pus in urine, and he appeared sicker than he ought to. This, together with his keeping to bed during the day, increase of pain in back, inability to lay on his side, and the fact of his having had some chills, which up to then were considered urethral, directed my attention to his loins, the right one of which was found to be slightly full and tender. He also had complained of constipation and pain in defecating, but it was supposed to be due to prostratitis, and not much further thought given to it. The loin was aspirated, and a bottle of pus, free from urinary odor, withdrawn. The case was then considered one of pyelitis with peri-nephritic abscess, and the treatment changed. A free incision and exploration was made, followed by drainage and washing. After some three months, the cavity finally closed entirely, and the man one day left without permission, but with some pyelitis left, as shown by a small quantity of pus voided with his urine.

3. Mrs. B. ; twenty-five ; married, no children ; school-teacher. History good and herself well, up to about three years ago, when she suffered more or less from vague abdominal cramps, not characteristic of anything, but likely renal in nature. During this time, she describes her urine as being generally colored and gritty ; red deposits. Frequent micturition developed and, later, irregular, indefinite back-ache, which she naturally attributed to uterine trouble. Later, her urine became offensive, and troubled her more. She lost flesh, and seemed to go steadily down-hill ; had occasional fever, and her case was diagnosed by several doctors as malarial. At the time of my first visit, which I made at the request of her physician, these symptoms had continued with increasing severity ; her loin had become swollen, tender, and deep fluctuation was present. Additionally, she suffered from constipation, lameness of limb on same side, which was contracted, and was unable to sit or stand erect. Urine was acid, con-

tained mucus and pus, and was voided five or six times during night. There was no evidence of spinal disease or of any other viscera.

Peri-nephritic abscess was diagnosed and verified by aspiration. Free incision was made, releasing a pint or two of offensive but not urinous pus. No calculous hardness, enlargement, or disease of the kidney substance was evident from a digital exploration. Drainage and irrigation was instituted, and for a time she did well, when symptoms appeared pointing to pus retention. The opening was then enlarged, some adhesions and pus sacs broken away, and the kidney again thoroughly explored, without discovering any change in its condition—since which time, I am informed, she has been doing better, but her general condition is bad and the prognosis serious.

4. This case was a man—forty-six—admitted to the Sisters' hospital in an almost dying condition. High temperature, delirium, dyspnoea, expectoration of large quantity of pus. Under stimulants, he managed to live a few days, and stated that he had been sick for several weeks, but only had the cough very bad for a few days, and for which his friends urged him to be taken to the hospital. He was too sick to obtain much history from, and from the physical signs I diagnosed pneumonia, followed by pulmonary abscess. The day of his death, my attention was called to a fluctuating swelling in his groin, which, however, I considered would be best studied at the autopsy.

Post-mortem showed large abscess cavity back of left kidney, which was itself normal, the pus having burrowed upwards through the diaphragm into the lung, and downward in sheath of the psoas to Scarpa's triangle.

A diagnosis early in the disease is always difficult and often impossible. Sub-acute, slowly-developing cases, when the local symptoms are not pronounced, are apt to be confounded with enteric or malarial fever, from which, however, they are to be distinguished by the gradual development of abdominal symptoms, eruption, and peculiar temperature in the one, and influence of ante-periodics in the other.

When pain is the prominent symptom, lumbago may be simulated, but it is usually bi-lateral, the tenderness more marked by pinching the muscles; there is no fever or contraction of the psoas, and as the case progresses, the diagnosis can be made

positive by noting the influence of treatment and the further development of characteristic one-sided features.

Neuralgia, pain, etc., not due to known pathological changes, are paroxysmal, and occur in neurotic individuals.

The pain of early spinal disease is relieved by suspension, and the disease defined by the hot sponge and pressure over individual vertebræ—later by curvature.

“Gibney” reports in *American Journal of Medical Science*—78 and 79—a number of cases of peri-nephritic abscess in children, where the symptoms simulated coxalgia. In such cases, the diagnosis is to be made by observing the absence of pain at hip on motion, tenderness over trochanter, wasting of limb, etc., and, additionally, by the presence of lumbar, tenderness, difference in temperature of the two loins.

When the local condition is well marked, these abscesses are to be differentiated from numerous other swellings liable to occupy this region.

Hepatic tumors are influenced by respiration; splenic are more apparent anteriorly—both are non-febrile. Fecal accumulations are influenced by purgatives.

Peri-typhlitis has been confounded, and occasionally, when burrowing of pus has occurred, it is extremely difficult to decide. Both are local inflammatory diseases with general symptoms, and are apt to develop and pursue indistinct courses. In the one, however, the local manifestations are chiefly behind and above; in the other, in front and below; and the histories show their development from these different points. Flexion of thigh is absent in one, and œdema of limb liable to occur in the other, and, when opened, peri-typhlitic abscess may contain stercoracious pus and even gas.

From psoitis it is distinguished by there being more trouble in front than behind, the pain and swelling being nearer the middle line than in one drawn from the axilla to crest of illium, as in lumbar abscess. Psoas abscess, depending on caries of vertebræ, is accompanied by spinal symptoms, and pus contains bone detritus.

Disease of the kidney itself may be mistaken for the abscess in question. It may precede, co-exist and be the cause. Most of them, however, cause an enlargement more appreciable through the abdominal walls than through the loins, are not marked by pain, fever and contraction of the limb, and the urine furnishes characteristic information.

Briefly, *cancer* is non-febrile and accompanied by cachexia hematuria and family history.

Hydro-nephrosis pertains to a non-inflammatory fluctuating tumor, with a definite history of gravel or calculus, colic, blood, urinary obstruction, no pus, and variation in quantity of urine excreted.

Pyo-nephrosis is febrile, but less painful, the swelling a gradual growing circumscribed tumor, and there is absence of contraction of psoas.

Tubercular kidney, if not present in a generally tuberculous subject, is usually accompanied by manifestations of the same disease lower down, and, in addition to pain swelling in lumbar region, pus and cheesy matter appear in the urine, in which the bacillus might be found.

The primary or secondary nature of these abscesses is determined by the clinical history which may precede each, and which has been outlined. The prognosis is good in primary cases, if early evacuation takes place externally, either spontaneously or by incision; but as there is little tendency to such evacuation, burrowing has often occurred before surgical interference, and in direct proportion to its extent and the coincident constitutional impairment, the prognosis becomes doubtful and even grave. In secondary cases, the forecast is upon the same lines, plus the gravity of the pre-existing disease. Often a cure is incomplete, a fistula remaining, which may be permanent, or heal only after some years.

Efficiency of treatment depends largely upon early evacuation.

Peri-renal inflammation can occasionally be checked if recognized before suppuration. Under such circumstances, anti-

phlogistic treatment is to be followed—local blood-letting, poultices, blisters, purgatives, anodynes, etc.

Suppuration demands free incision as soon as its existence is detected, and the aspirator used, if only suspected. Free early incision saves life, and hastens recovery. Even if there be only tenderness and tension, with great pain, an incision is indicated, relief following, and, later, pus. The opening can be oblique or vertical, and be made boldly or, what is better, by a gradual dissection—Hilton's method. The escape of matter should be followed by thorough exploration of kidney, disinfection, drainage, irrigation. One precaution is to be borne in mind: not to permit too early closure; particularly in secondary cases, the granulations should force the drainage-tube out. Remaining fistules are to be treated upon ordinary principles and, in any event, appropriate constitutional attention is given in way of food, stimulants, tonics, etc.

A CASE OF BURSTING OF THE BLADDER, WITH REMARKS.

By Dr. MARCELL HARTWIG, Buffalo, N. Y.

Bet., *æt.* 40, a strong man, was jammed in between two railroad cars on October 20, 1887. Both trochanters were caught, and, through the pressure, the man was rotated around the axis of his body, whereby his full bladder certainly suffered pressure. At the start, the right leg was very painful, while moved, in the hip-joint; ditto the right sacroiliac joint and the right trochanter. The left trochanter was hardly sensitive. Two inches above the symphysis pubis was a hardly noticeable red streak on the skin, an abrasion close above the right trochanter. The perineum was slightly sensitive, and from the orifice of the penis, a drop or two of blood were oozing. It soon appeared that the right hip was not seriously hurt, while the articulation sacroiliaca was swelled, without dislocation. The interest of the case centered around the bladder. Since five o'clock in the evening till ten on the next morning, while using sixteen doses

of ten drops chlorodyne each, he did not pass a drop of water. I then introduced a Nélaton catheter No. 22 F. without trouble, but only a few drops of blood came. Even attaching a suction-pump, only a couple of tablespoonfuls of blood appeared. The usual signs of peritonitis were wanting, the pain in the lower abdomen excepted. Percussion showed a dullness, of the form of a bladder, reaching till to the middle between symphysis and navel. The space was oval and felt somewhat more resistant. Thus, either the bladder was distended with blood, or urine was accumulated between bladder, peritonæum and frontal wall of the abdomen, imitating the shape of the bladder. I decided the latter condition to prevail, assuming that the suction would have sufficed to force blood-clots out and to draw urine, were there any in the bladder. I proposed to tap the dullness with Dieulafois' troicar. That was refused, and I had a chance to observe the forces of nature. Twenty-four hours later—that is, after forty-one hours—no urine yet. Silver catheter, well-disinfected, of course, introduced and moved a little to dislodge blood-clots. Nothing came but a teaspoonful of blood. Dullness reaches to the navel; shape of bladder. Next night, after at least fifty-three hours, he passed, repeatedly, urine, the dullness not diminishing. Even after eight days, *status quo*. The conclusion was sure that now, after no space existed in the prævesical space, the urine had to come the natural way. After eight days, he was able to stand and to pass a glass of urine at once. If he then sat down on the edge of the bed for five minutes, he could pass again a glassful, a nice proof that during that time urine had leaked from the prævesical space into the bladder, because kidneys cannot manufacture urine as fast as that. At the same time, the dullness lowered two fingers' width. On October 30th, he could pass no two portions any more. Dullness in the center between navel and symphysis. This makes us, of course, conclude that the rent in the bladder had closed. The first portion was every time more cloudy than the second, coinciding with the microscopical appearance of numerous resp.; few leucocytes. The dullness lost, by-and-by, the

oval shape and widened in the lower region, especially towards the left. On October 30th, I noticed on the *left* trochanter a small sac, which seemed like a late burst of a subcutaneous vessel, but the distinct fluctuation roused already my suspicion to the question whether there was no urine in there. On November 1st, the bag was already considerable, and I emptied it with the hollow needle, obtaining a pint, almost, of clear urine.

The dullness reached, on the left side, along the whole length of Poupart's ligament, till to the spina anterior superior ilei; the upper edge stood midway between navel and symphysis pubis. Light urethritis. No erections. On November 3d, I emptied again a glassful of urine from the sac on the trochanter. A test on gelatine, taken with all precautions, remained sterile, as after some time appeared. On November 13th, the sac was emptied the last time. The urine appeared clear and not decomposed. On November 15th, suddenly, the right testicle swelled. Well-characterized epididymitis, lasting for six days. In the urine, which the man passed *per vias naturales*, there was sufficient pus, but I was not able to detect any gonococci, while the man denied of ever having had any gonorrhœa. The stream of urine is slightly thinned. This circumstance is probably explained by the fact that, right from the start, there was some hemorrhage in the perineum, the same having had a bluish hue. January 1, 1888, the man was well without further treatment.

Epicrisis.—Why the man had urethritis and epididymitis, I am not prepared to explain; ditto not why the urine accumulated just on the *left* trochanter while the man was always laying on the back. It is hard to make up a definite opinion, too, in regard to the question whether the urine diffused through the sciatic notch or under Poupart's ligament. The first presumption seems to me the more probable, because abscesses from the spinal column reaching Poupart's ligament pass underneath of it, and not unto the trochanter. Highly interesting is the condition of the subfascial urine; not a trace of decomposition, no uræmia, no micrococci. I am sorry of not having taken any notes of temperatures, but, as far as I can remember, the first four or five

days the temperature was raised to about 103, thus an aseptic fever present, as seen likewise with large subcutaneous fractures.

Thus we see here one of the few cases where the *vis medicatrix naturæ* sufficed, with very little aid, to perfect a cure of ruptured bladder. It is almost strange that the peritonæum did not burst anywhere from so large an effusion; but if we consider that on the other side of that membrane an even pressure from the adjacent intestines exists, the fact appears less remarkable. As far as I had occasion to peruse the literature, I found the recommendation always repeated to make an incision above the symphysis pubis in subperitonæal rupture of the bladder. This case shows that the incision is not an absolute necessity. At all events, distinctions will have to be made, according to whether the bladder was previously in perfect order or perhaps affected with catarrh. (Urethral stricture was often a cause of rupture.) If the bladder is, at the time of the accident, in a diseased condition, sub (pro) peritonæal phlegmone would have to follow the rupture. With absolute antisepsis, an incision would certainly never do any harm. On the other hand, I would certainly prefer to leave things to nature, with a previously healthy bladder, where external conditions would prevent to maintain an absolute antisepsis, like here, where the patient's will prevented me from active treatment. Another case essentially analagous I could not find in the literature to which I have access here. One thing must exist for a happy result of the expectant plan, and that is, the rupture must be extra-peritonæal. This is the main question in regard to treatment, because intra-peritonæal ruptures left to themselves are invariably fatal. Here the urine fills the peritonæal cavity without finding a limit, and invariably produces peritonitis with uræmia. The differential diagnosis is the punctum saliens, and such is not by any means easy, because in intra-peritonæal rupture the symptoms were often, at the start, so insignificant that patients went long distances to see the doctor.*

* More about differential diagnosis: See diagnosis and treatment of intra-peritonæal wounds of the urinary bladder, by Alexander W. Stein, *Medical Record*, February 6, 1886, page 146. *Medical News*, February 5, 1887, page 159, and 1884, page 418. R. Weir, *Medical Record*, January 22, 1887, page 88. Lidell, John A., rupture of abdominal viscera. *American Medical Journal*, April, 1867, page 358 and following. Heath, Ch., *Lancet*, March 1, 1879. B. Beck, *Deutsch Zeitschr., für Chir.*, Bd. xix., reported in *American Journal of Medical Science*, October, 1884, page 585.

What course, then, is the most reliable? I do decidedly believe, with reliable antiseptics, the probatory incision, which has to end in drainage, if an extra-peritonæal rupture is met with. If, again, intra-peritonæal rupture is found, the bladder is to be stitched with two rows of stitches, without inclusion of the mucosa, the peritonæal cavity is to be cleansed with antiseptics (I prefer $\frac{1}{3}$ per cent. salicylic acid solution), and the caveum Douglasii drained.

Concerning drainage of Douglas's pouch after suture of the bladder, I am convinced that it gives greater security than the simple sewing of the abdominal incision, though it exposes to infection after the operation. Here I stand entirely on the lamented Sims' shoulders, believing that the future will return more and more to drainage in all abdominal operations. Where or how shall we know if the cavity of the abdomen was soiled *already* before an operation, whether each coccus is dead or removed? Even if experience teaches that a good many may be harmlessly absorbed, the drainage remains the grandest safety-valve of a wound; the micrococci certainly more harmless when flowing out as though absorbed. The execution only of the drainage is less convenient in man than in woman. To drain upwards in the recumbent position, is not the most suitable way, and downwards, through the *perineum*, I am not aware that somebody has tried it. All the same, I do believe the future may show this way practicable. Once I have experimented in this respect on the cadaver. It is not easy to pass between bladder and rectum without pricking either. I had tried a drain of the thickness of a little finger. With a thinner one, it will be less difficult. At any rate, the rectum should not be pierced; rather let us chafe the prostate. Already the gas from the rectum entering a drain would induce fatal septicæmic peritonitis. In passing the drain, the left index ought to be in the rectum, the thumb on the perineum, and, for piercing the latter, an instrument should be used in Douglas's pouch, analogous to the one which is used in our kitchens to draw the slices of bacon through the filet.

Longer than five days a drain, generally, need not lay, and that long the stools can be retarded and asepsis insured. I am

pretty sure a simple drainage of this kind might cure a number of intestinal perforations without using any further means.

For sewing I should use juniperized or chromacized alcoholic catgut. Some have pleaded for silk, and even used it with success, but I should fear that silk would finally fall into the bladder and become a nucleus of stone. Peritonæal ruptures which have been cured by other means than sewing are only a very small number in the literature—I almost think only three—while extra-peritonæal ruptures cured without incision seem not to be much more numerous. The correct conclusion, therefore, is the above given. The differential diagnosis never being absolutely certain, what is the use losing time with catheterism, etc., while it is a fact that, with intra-peritonæal rupture, every hour lost jeopardizes the result more and more? This loss of time counts more than anything else. This is plainly seen in the unfailing good results where the bladder was accidentally cut during an ovariectomy or other abdominal operation, and sewed immediately. I never read a case where the result was fatal. The number of successful sewings of the ruptured bladder, though only amounting to half a dozen, shows they were all early cases. Of course, a test has to be made, after stitching, whether the bladder is fluid-tight. Only the question whether a catheter is to be kept in, or whether sufficiently frequent catheterizing has to follow, is dubitable in my mind, though I am inclined to prefer the latter; if not the lateral lithotomy, which was used often enough without sewing, to a certain advantage, while the stitched successful cases of the literature got along without the prostatic incision. Were the patients not shocked enough through the accident, this incision could not count much. In subjects we have to deal with, the incision is an additional risk, and well worth considering. Only the shots through the bladder seem to deserve different treatment. Here the experience has shown remarkably frequent cures, notwithstanding that often terrible complications exist. So Cheselden, Hildanus and Garengéot already have operated stones where bullets formed the centers, showing cured cases of shot bladder. The easy

discharge of the urine through the channel of the bullet explains the relative frequency of cured shots of the bladder. A good many reported cases seem to have been extra-peritonæal. The first care in open wounds of the bladder will be to keep them open, so that the urine will ooze out perfectly easy, until sufficient adhesions are formed, preventing escape into the peritonæal cavity or into connective tissue. If possible, a drainage-tube should be introduced through the wound, but if any boring, etc., should be required, it would be far preferable to make lateral lithotomy for drainage, a proceeding which was frequently successful in those cases. Of late, it *was proposed* to connect the permanent catheter with continual siphonage into an antiseptic fluid on the bedside. It appears well on paper, but such long presence of a catheter is badly borne, causing violent contraction of the bladder, and all motions of the patient are liable to spoil the beautiful idea in a real case, though the possibility of a successful use is undeniable.

Enfin, the danger of penetrating gunshot wounds of the bladder will be reduced yet by modern antisepsis, but the best hopes are in store for future intra-peritonæal bursts treated by early sewing. MacCormack had already two successful cases: for example, one with abdominal drainage and catheter in the bladder, one without both.

Six per cent. is the number of recoveries, according to St. Smith, in wounds of the bladder. Let us hurry, in future, to do the probatory incision, and not be induced by a happy stray case, like the one related, to temporize, and the percentage of recoveries will steadily increase, while it will become less and less true, what almost held its own through ages, that what Hippocrates says: "That every case is doomed."

Miscellany.

PERIODS OF ISOLATION FOR ERUPTIVE FEVERS.—Ollivier, in a report read to *Acad. de Med.*, advises that school children attacked with small-pox be strictly isolated for forty days, counting from the first day of the invasion. The same period should be observed for scarlet fever and diphtheria, while twenty-five days suffice for varicella, measles and mumps. Before the period of isolation has expired, the child should have several baths with soap, his clothing fumigated, the chamber well aired, and before being readmitted to the school, the physician should certify that these precautions have been carried out.

A free discussion followed upon the time necessary for whooping-cough, but no conclusion was reached.—*Medical Times*.

WHEN it is a question of nerves, the power of imagination is supposed to be stronger in women than in men, but this was not shown in a recent hospital experiment. Dr. Durand, wishing to test the practical effect of mind disease, gave a hundred patients a dose of sweetened water. Fifteen minutes after, entering apparently in great excitement, he announced that he had, by mistake, given a powerful emetic, and preparations must be made accordingly. Eighty out of the hundred patients became thoroughly ill, and exhibited the usual result of an emetic; twenty were unaffected. The curious part of it is that, with very few exceptions, the eighty "emeticised" subjects were men, while the strong-nerved few, who were not to be caught with chaff, were women.—*Medical and Surgical Reporter*.

"DOCTOR" is a very promiscuous title in America. The preacher is a "doctor." The school principal is a "doctor." The family physician is a "doctor." The veterinary surgeon is a "doctor." The dentist is a "doctor." The manufacturer of patent medicines is a "doctor." The remover of pedal excrescences, "without pain," is a "doctor." And so on. There are almost as many "doctors" in the South. But this is a free country. In Germany, under the despotism of a monarchy, this freedom is not allowed. An American dentist has just been fined in Berlin for putting "Doctor" on his cards.—*Medical and Surgical Reporter*.

THE USE OF BEDBUGS, FLEAS AND LICE.—A Rochester quack, in a pretentious address to the public, has disposed of a question which has long vexed the minds of thinking men. He addresses the profession in Latin, beginning, "*Quod inscripsi, erores artis Hypocriticae*," etc., but soon, very fortunately, begins in English to tell of his wonderful discoveries, among which may be mentioned the use of vermin. We quote from his brochure: "But the most wonderful thing as a hygienic safeguard, in the opinion of the philosopher, Nature supplies in the creation of the louse, bed-bug, flea and fly. The lazy, uncleanly and filthy are thereby constrained to scratch themselves, to the end that the purification and renovation of the skin, the combustion and moulting, so to speak, may properly go on. For precisely the same reason, is the inert phlegmatic restrained from his prolonged nap in the heat of summer by an industrious fly, and how ingratically he thanks the preserver of his life—the fly who disturbs him in his slumber! Alas! ingratitude is the reward of the world. And again the bed-bug—to what superhuman exertions in the interests of cleanliness is the busy housewife constrained, and to what exemplary diligence! Aye, indeed, the bed-bug is the unrecognized guardian—the faithful sentinel of Hygea. For the New Jersey mosquito, no knight ventures to lay a lance in rest; whilst the usefulness of the fly is incontestable. The time will soon come in which we may observe their restless flight, in seemingly purposeless gyrations. But they purify the air by a consumption of the bacteries, etc.; for just as the bees carry a powder upon their legs, do the flies carry a viscous substance upon theirs, for the removal of the invisible but obnoxious vermin."

FORCED RESPIRATION WITHOUT TRACHEOTOMY.—The attention of our readers has recently been attracted to Dr. George Fell's cases of opium poisoning treated by forced respiration with preliminary tracheotomy. Dr. Fell was probably the first to employ forced respiration with the bellows in the treatment of opium poisoning. In discussing apnœa in general, Ashurst (*Principles and Practice of Surgery*, page 370, edition of 1885,) mentions, among other methods of artificial respiration, that "*inflation with the bellows*, provided with a suitable mouth-piece or nose-piece, may be efficiently used, provided that care be taken to secure expiration by manual compression,

and that the instrument be worked gently and not more than ten or twelve times in a minute." Also on page 375, in discussing apnoea after tracheotomy, he states: "Dr. Beverly Robinson, of New York, has devised an ingenious "insufflator," by means of which the surgeon can directly inflate the patient's chest through the tracheal tube. This instrument, or a *double-acting bellows*, as recommended by Dr. B. W. Richardson, should be employed in case suffocation is threatened. If neither of these be at hand, an ordinary hand-ball syringe (reversed) may be used, as suggested by Dr. Green, of Brooklyn." From these statements, we are forced to believe that Dr. Fell's method or operation is not new, and that tracheotomy is not necessary in the treatment of opium apnoea.

Of the 582 new students enrolled in the School of Medicine, University of Paris, this year, 479 were French and 103 foreigners. Of the foreigners, twenty are Americans, twenty Servians, eleven Roumanians and eleven Turks. There are eleven women among the new students, and it is somewhat remarkable that all are foreigners, ten being Russians and one Greek. During and after the rule of the Commune in 1871, there were many French women who desired to obtain equal educational advantages with men. They were successful; many began the study of medicine and law, while some, as in the previous revolutions, dabbled in politics. Now that they have succeeded in obtaining their "rights," they seem perfectly contented to let the world go on in accordance with the old order of things, leaving the enslaved women of Russia and the United States to struggle for liberty and equal rights with men.

STUDENT-LIFE IN SWITZERLAND.—The students of the University of Berne recently sent a challenge to those of Zurich. The Tigrin Corps immediately responded by sending twenty of their best swordsmen. The duels continued until night, and were finished with a parade. When the train departed for Zurich, fifteen carriages in procession conveyed the wounded to the depot. Our French exchange, *Le Progres Medical*, regrets that two of the students took advantage of this dueling tournament to settle some old quarrels, and as a result one was very seriously wounded.

DR. A. W. ABBOTT publishes, in the *North-western Lancet*, what appears to be a treatise on the art of defecation. He attributes to the ordinary method of performing this operation on a seat, a number of serious ills, such as constipation, hemorrhoids, uterine displacements, and recommends a return to the primitive custom of squatting, as practiced by our uncivilized ancestors. It is to be hoped that some genito-urinary specialist will soon describe the best method of making water.

TRY the following prescription to abort an attack of acute bronchitis. Prof. H. C. Wood says that it is worth \$5,000 to every medical student :

℞ Potassii citratis ℥ j
 Syrupi ipecacuanhæ f ℥ j
 Succu limonis f ℥ ij
 Aquæ ℥ iij

M. S.—Two teaspoonfuls every three hours.—*Medical Times*.

WE acknowledge the receipt of No. 1, Vol. I., of the *Climatologist*, published in Washington, and conducted by Wm. C. Chace. This new journal is devoted specially to climatotherapy, medical geography, demography, preventive medicine, etc. The journal is published quarterly, and the subscription price fifty cents a year. These branches of medical science are growing in importance, and we predict that the *Climatologist* will successfully fill a place hitherto vacant in medical literature.

CHAGRES FEVER AT PANAMA.—It would be difficult to find a more unhealthy place than the Panama Canal at present. The hospitals are overcrowded, and many of the poorer workmen die in their tents, and even at their work. At Bas Obispo, with a population of 1,000, the death-rate is five or six a day, and sometimes reaches as high as twenty.

DR. F. R. DRAKE, Clinical Professor of Medicine, University of New York, died at his home March 1st, after a brief illness. Dr. Drake was in the prime of his life and professional career, being only forty-three years of age.

ANOTHER LONG-FELT WANT.—Caller—"Any back numbers of your magazine?"

Health Journal Editor—"Yes, sir. Which number do you wish?"

"I do not know the date, but I saw a line in a paper to the effect that it had an article entitled, 'How to lie when asleep.'"

"I know which number you want. Having trouble at night, eh?"

"I should say so. My wife says I talk in my sleep, and I know from the way she acts that I tell the truth."

A LONDON lady, who was a chronic invalid, after many years' treatment without improvement, was finally notified by her physician that he had exhausted all the resources of his art, and that, in his opinion, *tempus edax rerum*, was the only remedy which would help her. Not being a Latin scholar, she applied for this remedy at her chemist's, and he put up a compound which she continued to take for some years. The fraud was finally detected, and now a suit for damages against the chemist is in progress.

It is claimed that the opium habit can be successfully counteracted by the substitution of hypodermic injections of antipyrin. The antipyrin, it is said, acts as a sedative to the nervous system, but has no narcotic properties; hence, it can be used an indefinite time without causing the patient to contract the antipyrin habit.

THE New York State Legislature has appropriated \$185,000 for the erection of a new State Asylum for Insane Criminals, to be located at Fishkill. There will be a farm of 246 acres. The buildings are to be on a pavilion plan. There will be six general pavilions, two infirmaries, and a central administration building.

A YOUNG doctor, who had his eye on a banker's daughter, thought to win the favor of the father, who was his patient, by sending him a very low bill. Soon afterwards, he asked the father for the daughter's hand. To his surprise, the father refused, and, being pressed for his reason for refusing, told the young man he could not trust his daughter to a man who had such a poor head for accounts.—*Fliegende Blätter*.

A LITTLE boy came to a druggist with a prescription for castor-oil. The druggist put it up, and the boy offered ten cents in payment. "That is not enough money," said the druggist. "There's fifteen cents' worth in that bottle." The boy thought awhile, and then answered: "I'll tell you. You drink five cents' worth, and then the money will be enough."—*Fliegende Blätter*.

IN the United States, annually, the sales of patent medicines amount to \$22,000,000, of which \$5,000,000 is profit, and \$10,000,000 is paid for advertising. These figures suggest a reason why so many druggists prepare a "cough mixture" from a private formula. It is, in fact, oftentimes a patent medicine in embryo.

DR. FREDERICK PETERSON, formerly of this city, and recently connected with the Poughkeepsie State Insane Asylum, has removed to New York City, and opened an office at 34 East Twenty-first street.

"I AM sorry," said a clergyman, "that your wife has such a heavy burden to bear." "Yes, she does—that's so," acquiesced his parishioner. "She's laid flat on her back this seven years. Seems as if she'd get altogether worn out. I do wish she'd get well—or something."

DR. FOWLER BRADNACK, of this city, has recently published an amusing satire on quack advertising, entitled, "Dr. Case's Handbill." It may be obtained at McCready's.

The Medical Department of the Western Reserve University, Cleveland, has announced that hereafter a three years' course will be obligatory, and a matriculation examination required.

SALOL, although given a faithful trial in acute rheumatic cases, does not give as good satisfaction as salicylate of sodium, says the *Medical Times*.

A CALIFORNIA court has decided that a private hospital, in a populous neighborhood, is a nuisance, and must be removed.

MARKED pulsation at the supra-sternal notch and over the innominate, in aortic insufficiency, should not be mistaken for aneurism. The beat is not expansile, as in aneurism.—*Osler*.

WHEN convulsions first occur after the thirtieth year, and usually epileptiform in character, suspicion points to cerebral tumor.—*Osler*.

ONE hundred and forty-three students were graduated at the recent commencement of Bellevue Hospital Medical College.

CHILLS and fever, intermittent high temperature, and pus in the urine, the urine being acid, point to pyelitis.—*Osler*.

PROF. R. A. PENROSE has resigned from the faculty of the Medical Department of the University of Pennsylvania.

IN Paris, a Stomatological Society has been founded. The object is the study of diseases of the mouth.

IN abscess of the brain, the pus is often acid in reaction. The cause is not known.—*Tyson*.

DROPSY does not occur in mitral insufficiency, unless tricuspid insufficiency co-exists.—*Osler*.

Selections.

THE BACILLUS OF WHOOPING-COUGH.

“Dr. Afanasieff has succeeded in finding and cultivating what he believes to be the true bacillus of whooping-cough. This microbe differs distinctly from all other bacteria which have been described. It is somewhat like Friedlander’s pneumonia bacillus, but is shorter and thinner than the latter; besides, in gelatin it does not form nail-

shaped cultures, those which are produced having no hemispherical head. Its potato cultures, too, are quite different from those obtained from Friedlander's bacillus. Afanasieff's bacillus exhibits a remarkable degree of vitality, for jelly cultures that have become dry and have been kept for four months, appearing under the microscope to be more or less destroyed, are still capable of producing fresh cultures when fresh media are inoculated from the dried mass. Dr. Afanasieff's researches were chiefly made from the sputum of some of his own children, who were affected with whooping-cough. The mouth was well washed out with a permanganate solution, and the mucus coughed up after the next paroxysm or two examined. In this mucus, after staining with methyl-violet, and in the pus-corpuscles contained in it, the bacilli could be seen with a magnifying power of from 700 to 1,000 (Zeiss's eye-piece 3 or 4, one-twelfth oil immersion objective) as short rods, sometimes single, sometimes in twos, or even in short chains running in the direction of the mucus, sometimes again in small clusters. Their length was from 0.6μ to 2.2μ . Of course, other bacteria were found. Pure cultures, however, were easily made on agar-agar meat, peptone jelly, potato, etc. Dogs and rabbits were inoculated with a fluid culture mixed with chloride of sodium solution, some by means of injection into the trachea, others by direct injections into the lungs. All the animals were seriously affected, and many of them died. The symptoms were somewhat similar to those of whooping-cough, including cough, dyspnoea, and redness of the eyes. Many of the cases were complicated by broncho-pneumonia. On examining the bodies of those animals which died, the mucous membrane of the air-passages was found much reddened, and coated with a tenacious, clear mucus, in which, as well as in the pneumonic patches in the lungs, the bacilli were found. Similar appearances and the same bacilli were observed in the bodies of children who had died from whooping cough. As to treatment, inhalations and sprays of various antiseptic drugs would appear to afford the most ground for hope in relieving and shortening this complaint. The author points out that the quinine, benzoin and other substances which have been used as applications to the nasal mucous membrane by Michael and others, under the idea of combating a reflex affection, are really, perhaps, beneficial, from their property of destroying bacilli."

[Whether Afanasieff's bacillus has "come to stay" or not, there can be no question that pertussis is due to some specific germ, and that the proper treatment of the disease demands a recognition of the microbe. Elsewhere in the *Review* is a paper upon the use of the peroxide of hydrogen; the application of this remedy to the air passages in the treatment of whooping cough is referred to, and two cases cited. Of course, this is not enough to establish its value in this condition only so far as it goes.]

[In conjunction with the above, antipyrin, given four or five times in the twenty-four hours (a dose 3 to 4 grains to a child ten years old), the paroxysms were markedly diminished in frequency and severity, and the continuance of the disease abruptly shortened in spite of its occurrence being in the most unfavorable season—the severe weather of January and December. I was led to the administration of antipyrin by the fact that Prof. Germain See, of Paris, prescribed the drug successfully to a friend and patient of mine, who consulted him suffering with asthma. I have since observed in the *Medical Chronicle* the statement that Sonnenberg, in the *Deutsche Med. Woch.*, recommended it as the best remedy in whooping cough.]

"He has used it in seventy cases, and asserts it surpasses in efficacy and utility all other remedies. He gives one-seventh of a grain to very young children, and gradually increases the dose according to the age. To adults he gives fifteen grains. The medicine is administered three times daily, and sometimes once during the night. Children take it readily when dissolved in a little water and raspberry juice. The remedy should be continued throughout the attack, the cessation of it being accompanied by exacerbation of the cough. The average duration of cases thus treated is three to five weeks, and it rarely happens that more than six or seven paroxysms occur during twenty-four hours. Under antipyrin, the appetite and nutrition was found to improve. When Sonnenberg commenced this treatment at a late stage of this disease, he found that the paroxysms were at once reduced in violence, and that the expectoration was rendered more easy. In a few cases, the good effects of antipyrin were not noticed until a few days after its use had been commenced. Collapse was never noticed. Five out of seventy cases treated with antipyrin had complications; two suffered from pneumonia, and one of these died. The hygienic conditions of the patient

should, of course, be attended to, but Sonnenberg says that though in the majority of his cases this was not possible, the curative influence of the drug was very definite."

En passant I desire to state that the pronouncement against the use of antipyrin in treating the diseases of children has not been borne out by my experience. I recognize the fact that the drug in certain conditions is more or less depressing, and needs to be given guardedly, but this will apply to all medicine. None should be given carelessly or by unskillful hands. To the mother possessed of a mania for dosing, the "inert infinitesimals are a great boon," and she should be advised to confine her manipulations to that particular field of harmlessness.]—*Weekly Med. Review.*

THE GUIDING PRINCIPLES OF TREATMENT IN EXCESSIVE CORPULENCE.

By GEORGE H. ROHE, M. D.

The corpulency of alcohol and beer drinkers is well known. It is likely that the depression of nervous excitability, due to the constant use of alcohol, is partly responsible for the fat-accumulation, although the alcohol in ardent spirits, and in the case of beer, the carbohydrates additionally present, acting as respiratory food, save a portion of the fat in the food from oxidation, and permit its deposit as fat-tissue. The Banting diet consists in a large excess of proteids, and great diminution, almost to extinction from the bill of fare, of fat and carbo-hydrates. On the theory that proteids alone are muscle-builders, while fats and carbo-hydrates are fat-forming foods, the Banting diet was correct, but the evils of a strict adherence to it were manifest before the recent physiological researches demonstrated the fallacies of the theory. There can be no doubt that Bantingism will reduce excessive fatness, but it also decreases the proteid constituents of the tissues, and may thus cause dangerous and even fatal consequences. It is frequently impossible to arrest the rapid waste of muscular tissue under the Banting diet, and the individual rapidly declines in health, even if the diet is withdrawn and the patient put on liberal allowance.

On account of the evil results which were frequently noticed as following the strict Banting diet, this has been modified in various ways. Vogel, who introduced the method in Germany, allowed a larger proportion of carbo-hydrates, while Immermann proposes to

interrupt the treatment occasionally, and allow the patients to resume their habitual diet for a period. On the other hand, Cantani, the eminent Italian clinician, insists even more strongly than Banting, upon the rigid exclusion of fats and carbo-hydrates. Beer, spirits and the stronger wines are restricted or excluded from all dietaries for corpulence. Light acid wines are alone allowed.

In the last five years, two new methods, deviating in a rational direction from Bantingism, have attracted the attention of the profession. The first is that of Professor Ebstein, of Göttingen, who proposes a reduction of proteids and carbo-hydrates and an increase of fat. The philosophical reasoning of Ebstein claims careful consideration, since he bases it upon acknowledged physiological facts. He claims that less fat is deposited if there is much fat in the food than if the food contained an equivalent quantity of carbo-hydrates. Practical experience sustains this claim, as well as the further one that a smaller proportion of proteids suffices than is generally assumed. But an important point insisted upon by Ebstein is usually overlooked by his followers, namely, that active muscular exercise assists in the destruction of fats.

Oertel's method, which has also many earnest advocates, approaches, in its dietetic prescriptions, very closely, the Banting system, as will be shown presently by a comparison of the different classes of food-materials in the various plans; but an important element in Oertel's regimen is the extremely small quantity of fluids permitted. This is not original with Oertel, as Dancel had already, in 1863, insisted upon its importance.

Professor Kisch, of Prague, who is resident physician at the famous sulphate-of-soda springs of Marienbad, has had a very large experience in the treatment of corpulence. He prescribes the waters (which act as a purgative), advises active exercise, and regulates the diet. Doubtless, good results follow this treatment, for it is based upon rational principles. The treatment by cold baths and exercise is also successfully applied for the relief of this condition by Winternitz, of Vienna.

Directly contrary to the advice of Oertel to reduce the fluid allowance of corpulent patients, See, of Paris, largely increases it. "Let your patients drink—drink all the time," is the advice he gives. He thinks tea is the best beverage, and that it should be consumed in large quantities. This practice is based upon the fact that free drink-

ing of water promotes tissue-metabolism, and hence increases the oxidation of the fat, as pointed out by Landois.

There is abundant testimony that all these methods are efficient for the reduction of corpulence. For comparison, the following calculations of the amounts of the various food-stuffs in the Banting, Ebstein and Oertel diets are given :

	Banting.	Ebstein.	Oertel.
Proteids	170-180 grms.	105 grms.	156-170 grms.
Fats	7.5 grms.	60-100 grms.	22-43 grms.
Carbo-hydrates .	80-85 grms.	45-50 grms.	71-114 grms.

Landois recommends a gradual and equable reduction of the entire bill of fare, with active exercise in the open air, purgation, cool bathing, stimulation of the skin, restricted hours of sleep, light clothing, and free consumption of liquids. There is reason to believe that such a regimen is more efficient and safer, even if not so rapid in its action, than a plan which depends principally upon the withdrawal of one or other class of food-materials.—*Philadelphia Medical Times*.

STERILITY IN THE MALE.

Dr. Belfield emphasizes the fact, largely ignored in practice, that potency does not secure fecundity. Natural desire, complete erection, copious and well-timed ejaculation, and intense orgasm, may all be exhibited by an absolutely sterile man. The responsibility for a childless marriage is popularly, and but too often professionally, attributed to the wife; investigation of the husband is omitted, or limited to ascertaining that the act is normally performed. The wife is treated; intra-uterine applications are made, pessaries applied, the cervical canal enlarged; yet no conception takes place, because no normal spermatozoa are deposited.

In every case in which medical advice is sought as to barrenness in marriage, the first examination should be directed to the semen, no matter how vigorous and potent the husband may be. Sterility without impotence may be due to the absence of normal spermatozoa from the semen—azoospermism; or to the failure to ejaculate—aspermatism. The most frequent cause of aspermatism is urethral stricture; a contraction which may offer no serious obstruction to urination, may from the compression during erection prevent the passage of semen. Gross suggested that the occlusion is produced wholly or

partly by spasmodic contraction of the urethra at the sensitive point. A contracted meatus or tight phimosis in the same way might prevent the discharge. Other causes are congenital defects or malformations, inflammatory occlusions, concretions formed in the seminal vesicles or prostate, etc.

Azoospermism is the most frequent cause of male sterility, and is by no means rare. This cause was assigned by Kehrer to fourteen out of forty childless marriages. The most frequent causes are bilateral obliteration of the epididymis and vas deferens; bilateral orchitis; arrest of growth of the testicles—the latter common in cryptorchids. Of eighty-three cases of double gonorrhæal epididymitis, seventy-six were afterwards without sperm-cells in the semen. The facts cited show that childless marriages are often referable to the male.—*Indiana Med. Journal.*

THE OBSERVING PHYSICIAN.

Dr. Bedford Brown, of Alexandria, in delivering the President's address before the Medical Society of Virginia, at its late session, said: No physician can become a successful student of the constitution and diseases of his race who does not cultivate assiduously habits of observation. It must be a law of his life. When we cease to be observers, we inevitably fall into habits of routinism. Probably no class of men see more of the mysteriously shifting phases of nature, or have a wider field for observation and a fitter one to profit by those means, than the practicing physicians. In truth, every physician, to be successful, must depend largely on what he observes at the bedside. This is the grand theatre for medical observation; for the books, with all their profound and comprehensive learning, guide us only over a portion of the way, and then leave a vast field, dark, unexplored, and full of mystery, in our travels, through which we must depend largely upon our own good sense and personal observations. And it is in this unexplored region of medical science that the practical student most needs his powers of observation. There exists stored up in the mind of every practicing physician, acquired by personal observation in his silent watching of disease, an unwritten experience that must be of incalculable value to himself, upon which he is at liberty to call on all occasions. Every good practitioner possesses a stock of this unwritten experience, which is

always ready and convenient for application to practical use. Every man is a learner and can be a teacher on occasions. Every intelligent practitioner could, if so disposed, give to the profession useful and valuable information, derived from his own observation and experience, which no other possesses. But it is sadly true that some men never observe. Some observe superficially, while others are profound and analytical observers of everything that comes within their mental range. It is the latter who accumulate valuable and useful information from every source, and who become conspicuous as men of resource and practical worth.

ANTIPYRIN IN MIGRAINE.

During the last two months, I have treated twenty case of migraine ; several of the patients having suffered for over ten years, and, finding all drugs useless, had become reconciled to being periodically prostrated for one or two days. In every case, I ordered eight grains of antipyrin, dissolved in water or lemonade, to be repeated each half hour until cured, the patient to remain lying down. Most of the cases were quite cured by two powders, but the most obstinate yielded to three, and in no case did the antipyrin fail. A cup of warm tea sometimes seemed to help, and the only inconvenience due to the treatment was, in a few of the cases, considerable sweating.

Many of the patients can hardly credit that, instead of being utterly helpless for twenty-four hours, they can now cut short an attack in one hour.

There is another great advantage in using antipyrin, and that is, that it prevents as well as cures these attacks. One lady, who cannot remember having fewer attacks than three a month, each lasting about thirty-six hours, has been quite free for eight weeks, and this she attributes solely to the occasional use of an antipyrin powder.—*Weekly Med. Review.*

CONTRIBUTION TO THE STUDY OF HYDRASTIS CANADENSIS.

Givopiszew, of St. Petersburg, has recently made an elaborate study of this old American remedy, with the following results :

1. Aqueous extracts of hydrastis, even in large doses, are not poisonous to warm-blooded animals.

2. Hydrastis always produces cardiac depression and consequent reduction of arterial tension.

3. It always produces uterine contractions. The aqueous extract is to be preferred for this purpose. The contractions of the pregnant uterus near term are most powerful, those of the virgin uterus weakest.

4. Large doses of hydrastis may induce premature labor after the fourth month.

The author sums up the clinical uses of hydrastis as follows :

1. Hydrastis is an excellent remedy for uterine hemorrhages due to inflammations or misplacements of this organ; also for profuse hemorrhages occurring about the menopause.

2. The uterine contractions produced by hydrastis are weaker than those produced by ergot.

3. The use of this drug is followed by no untoward symptoms. It produces no gastro-intestinal disturbance, but, on the contrary, will frequently relieve dyspepsia.—*Bulletin Gen. de Therapeutique.*

UTERINE HEMORRHAGE.

By WILLIAM GOODELL, M. D.,

Professor of Gynecology, University Pennsylvania, Philadelphia, Pa.

Suppose a woman, about fifty years of age, who has borne children, comes to you with the statement that at the age of forty-five the menses ceased, and that she had no discharge of blood from the vagina from that time until six months ago, when she again began to lose blood: what would you suspect? You should suspect cancer of the cervix. Why? Because as a result of her labors a laceration of the cervix has probably happened, and a carcinoma has developed in the cleft of the tear. I will venture to say that in ninety-five out of a hundred cases this diagnosis would be correct. [That was my suspicion in a case which I had placed under the care of Dr. James B. Hunter, of this city, who found only fungoid degeneration, and cured the patient by dilating and curetting the uterus. An almost identical case occurred in the practice of Dr. A. P. Dudley, who presented the material removed by the curette to the New York Pathological Society.—ED.]

Suppose, however, that a woman, also about fifty years old, has not borne children, and that the menses have not ceased, but have

continued and increased in quantity : what then should pass through your mind ? You should infer that the hemorrhage is probably due to one of two factors—either to a fibroid tumor, which is the more common, or to a polypus. The fact that she has not borne children would tend to eliminate the suspicion of carcinoma ; for it is exceedingly rare to find cancer of the neck of the uterus in sterile women. I have, however, seen this in two instances, one of which, however, tends to strengthen the rule. This was the case of a lady, about sixty years of age, who had a large fibroid tumor of the womb, which, in the process of enucleation, had forced open the os to the size of a silver dollar, and was protruding from it. I wrenched the tumor off and removed it. Cancer subsequently developed in the cervix, which had been injured by the long protusion of the tumor. The second exception came to my notice a few months ago. It was that of a married lady who, I am sure, has never borne a child. She had a cancer of the neck of the womb, from which she died. Carcinoma will sometimes attack the fundus of the uterus in the sterile, but this is also very rare.—*Va. Med. Monthly.*

ANTIPYRIN IN ACUTE BRONCHITIS OF CHILDREN.

For some months, innumerable articles have appeared in current medical literature discussing the physiological and therapeutic action of antipyrin. That the drug has a wide range of usefulness, is an undoubted fact. There is little doubt but that the drug will obtain a permanent place in therapeutics, but we need much more exact information in regard to the indications for its use. It is surprising, as Friedlander points out in a late number of the *Therapeutische Monatshefte*, that among so many articles describing the action of the drug, so few have appeared which consider its usefulness in the diseases of children. Friedlander has observed with care the indications by which the usefulness of the drug can be gauged in individual cases of acute bronchitis in children.

If the cases of bronchitis are classified according to their amenability to antipyrin, two groups must be formed, the first embracing those that are most benefitted by the drug, and the second, those that receive little aid from it. The first group embraces those who have a temperature of 104° F. (40° C.) and who are well nourished ; the second, those that have a moderate temperature, 102° F. (39° C.) or

less, and who are not well nourished. Both classes are aided by antipyrin treatment, but the former much more so. Usually after the administration of a dose, the little patients break out in a profuse perspiration, the temperature falls, they sleep for an hour or so, and awake with a feeling of well-being. The cough is usually looser, and the breathing easier. The dosage recommended is for children under five and over two years, twelve or thirteen grains (0.9 gms.). Its effect will continue from twelve to fifteen hours, and, therefore, two doses must be given daily. To a child two years old or less, seven grains (0.5 gms.) may be given, but only one dose will be needed in the twenty-four hours. During convalescence, one-half of the above-mentioned quantities are given at a time. The treatment of acute bronchitis among children by antipyrin, as recommended by Friedlander, does not include the simultaneous use of expectorants.—*The Epitome*.

GRADUATES IN MEDICINE IN THE UNITED STATES.

Dr. Perry H. Millard, of Minnesota (*Journal American Medical Association*) says: We have in the practice of medicine in the United States to-day one physician to every 755 inhabitants. They have in England and Hungary one physician to every 1,666 inhabitants; in Italy, one physician to every 1,639 inhabitants; in Austria, one physician to every 2,932 inhabitants; in Germany, one physician to every 3,225 inhabitants; in France, one physician to every 3,780 inhabitants; in Sweden, one physician to every 7,909 inhabitants. It will, therefore, be seen that the proportion of physicians to the population is ten times as great in this country as in Sweden, four times as great as in France, Germany and Austria, and twice as great as in Great Britain, Italy and Hungary.

The number of medical schools in this country is on the increase, and this increase is not in response to the demands of either the profession or public. Of the 130 medical institutions in this country, less than one dozen are in any way endowed. Seventy-nine colleges of this country graduate men upon two courses of lectures and three years of pupilage.

POISONING BY A TEN-GRAIN DOSE OF ANTIPYRIN.

S. Peters, M. D., in the *Medical Register* of March 24th, reports the following case :

For a severe headache, of a nervous character, in a lady—Mrs. H.—of about twenty-five years of age, and otherwise healthy, I prescribed two powders (ten grains each) of antipyrin, one to be taken an hour after the first, if needed. She took one about 9.30 P. M., and in two or three minutes she began to experience a “snapping” in her head, along with an itching and burning in the mouth and throat, particularly in the roof of the mouth. This feeling also extended to the eyes, nose and ears, and became so violent that she involuntarily thrust her fingers into her mouth and ears to seek relief. The “snapping” in the head increased in intensity till she became almost frantic, and ran up and down the room screaming, partially losing control of herself, and apprehending acute insanity. Sneezing soon commenced, and became extremely violent, the act being repeated at least fifty times, while the nose and eyes were running a very copious, watery fluid. The turgescence of the mucous membrane was so extreme, that she could not breathe through the nostrils for several hours—indeed, not until the next day. Following all this, there was a stupid, tormenting feeling, with swelling of the nose and eyes, till, exhausted, she finally fell asleep. This sleep was disturbed and tiresome, but the headache proper was relieved. The most violent part of the process continued for only about ten minutes, but recovery was not perfect till the next day.

THE DRUGS OF NEW YORK.

The *New York World* has been recently conducting a series of analyses, from which it deduces the conclusion that nearly forty per cent. of the drugs sold in New York City were below the standard required by the Pharmacopœia.

“In a few cases, drugs were found to be of an inferior quality, notably ipecac., in which the medicinal portion of the drug had entirely disappeared; senna, which contained decayed leaves possessing no value; gentian, long kept and worm-eaten; taraxacum, aconite and rhubarb, inferior specimens when gathered.

“The most important adulteration discovered was in the tinctures of nux vomica and opium—articles over which the retail drug-

gist has absolute control. In the matter of crude drugs, he is often at the mercy of the wholesaler, but in pharmaceutical preparations like the above, he, and he only, is accountable for whatever deficiency may exist. He can purchase powdered opium and powdered nuxvomica of unquestionable value, and, in the case of the former at least, samples which have previously been assayed and have their alkaloidal strength printed on the label. From these, by following the directions of the Pharmacopœia, he can readily produce tinctures which shall absolutely correspond to the official requirements."

BENZOATE OF SODIUM IN UREMIA.

Parzevski puts forth some remarkable claims regarding the curative power of sodium benzoate in uremic intoxication (quoted in the *Bull. Gen. de Therap.*, Dec. 15, 1887). He administers four to eight grammes (3j-3ij) a day, in solution or capsule, the latter preferably. Twice the quantity can be given by the rectum, if well diluted. Under the action of this remedy, the paroxysms lessen in severity, the intervals grow longer, and the convulsions, after a time, cease entirely. Profound sleep is produced by it, and during this the cerebral functions are restored. When albuminuria exists, a marked diminution occurs in the quantity present, or the albumen disappears entirely.

[If the claims are substantiated, they will furnish another strong argument in favor of the benzoate of soda in scarlet fever and diphtheria. Why it should be given in capsules, does not appear.

On general principles, all remedies are better when given in solution; and when they are so far removed from being disagreeable as is this drug, the liquid form is certainly to be preferred. The following formula is an agreeable way of administering it:

R	Benzoate soda	℥iv.
	Glycerine	℥ss.
	Aquæ menth. p.	℥iiss.

M. Sig.—Teaspoonful every hour or two for an infant.]—
Weekly Med. Review.

NEW RESEARCHES WITH ACETANILIDE.—Acetanilide (antifebrin) has been recently subjected to a careful experimental and clinical investigation by Herczel, of Heidelberg. In rabbits, the drug produced

grave toxic symptoms only when given subcutaneously and in larger doses. Animals, when given larger quantities of antifebrin for some time continuously, presented symptoms of fatty degeneration of the heart, liver and kidneys. The blood, particularly, becomes altered by the drug; there is a decrease of the hæmoglobin and the alkalescence of the blood. The spinal cord is depressed by the influence of the drug. Antifebrin has become the routine anodyne at the Heidelberg clinics, and is exhibited when all other remedies have failed. It has been found particularly useful in neuralgia of the face, the ears, the muscles, and in intercostal neuralgia. In the radiating pains of otitis, periostitis, carious processes, vesical polypi, and in hemi-crania, the drug has also yielded gratifying results. Its somniferous properties, of course, enhance its value. In anæmic persons, the drug is contra-indicated. The daily dose of antifebrin ought not to exceed thirty to thirty-seven grains, and its prolonged administration is to be avoided, to prevent the depraved condition of the blood following upon aniline intoxication.—*Schmidt's Jahrbücher*.

ANTIPYRIN AS A UTERINE SEDATIVE.—M. H. Chouppe has already called attention to the good effects of antipyrin in uterine pains after parturition or in dysmenorrhœa. In proof of this, he relates the following case: A woman, aged thirty-five, was suffering from a large myoma, situated in the posterior wall of the uterus, accompanied by copious hemorrhage, which reappeared after menstruation. Ergot checked the hemorrhage, but caused such severe uterine pains that it had to be discontinued. Large doses of morphine were administered; these caused the pains to disappear, but at the same time the uterine contraction was relaxed and hemorrhage reappeared. Ergot was again administered, with similar result. The attacks of uterine pains lasted two or three hours. M. Chouppe then had recourse to antipyrin. An injection, containing two grammes of antipyrin, was administered. At the end of twenty minutes, the pain disappeared. M. Chouppe then tried the following experiment: An injection of antipyrin was given half an hour before the dose of ergot. The patient experienced no pain, although there was active uterine contraction; hemorrhage was arrested. M. Chouppe concludes that antipyrin relieves the pain caused by the contraction which is produced by ergot without dimin-

ishing the contraction. He believes that it acts upon the spinal cord, and might be administered with advantage during parturition to women of an irritable temperament.—*Brit. Med. Jour.*

CANCER OF THE CERVIX.—Clinically, three cases can be distinguished: (1) The existence of an infiltration, diffuse, or limited to the cervix, without ulceration. One would willingly believe it a sclerous metritis or a myoma of the cervix. Absence of ulceration and the even distribution of the induration plead against cancer, but the actual truth cannot be obtained but by a microscopic examination of a piece of the tissue. (2) The cervix is the seat of an ulceration accessible to the finger, and to the eye by means of a speculum. If ulceration rest upon an indurated base, and if the borders are equally indurated, the diagnosis of cancer is undoubted. It is the induration which above all constitutes the chief element in diagnosis. Ulceration can assume other very different aspects. (3) Infiltration and ulceration occupying the most elevated portion of the cervix, whose visible parts appear bloody. Here cancer can be only suspected. The diagnosis can only be established in a positive manner by dilation of the uterine orifice after the method of Vulliet. To the diagnosis of cancer itself must be added that of the kind and extent of the affection. The kind is of slight practical interest, as it consists of an epithelioma or carcinoma, and the prognosis does not differ in the two cases. It is different, however, with the extent of the disease. Touch, which reveals the local condition, the mobility of the uterus, and lastly, a study of the phenomena of the pain, lead us to this diagnosis.—*L' Union Medical—Quar. Comp.*

Editorial.

BUFFALO MEDICAL COLLEGE.

The annual commencement occurred on the 28th of February. The alumni of the college assembled in goodly numbers, and were welcomed by Dr. Mann on behalf of the Faculty. After a graceful tribute to the memory of Dr. Rochester, Prof.

Mann alluded in glowing terms to the present incumbent of the chair, as one who had proved himself a worthy successor to Flint and Rochester. We are gratified, indeed, to note that our predictions as to the position which Dr. Stockton would take among his colleagues in the Buffalo Medical College, have been so abundantly fulfilled. His innate ability and the advantages which he had derived from his earnest efforts, in conjunction with his late confreres of Niagara University, to establish a more thorough system of medical education, convinced us that he could easily take the first place in the old college, not only with credit to himself, but also to the great advantage of the institution. Without intending to throw too great a responsibility upon Dr. Stockton, we cannot but recall with pleasure our prediction, that his appointment would lead to the gradual introduction of more rigid examinations and a more faithful performance of the great responsibilities to the community and to the profession, which devolve upon the professors of our medical colleges. Last year, we had occasion to note the fact that every candidate for graduation had triumphantly passed all examinations. This year, it is announced that fifteen per cent. of the candidates were rejected, and that in the ensuing year the course is to be lengthened. This is progress indeed, and we predict that it will please every alumnus of the college. We regret, however, that sufficient courage has not yet been instilled to lead to the elevation of this school from the ranks of the "two-year class, requiring no matriculation examination," whose diplomas will not be recognized in many of the states. The alumni have the right to demand that the college shall keep abreast of other reputable institutions, and it may serve to stimulate the authorities of the college, to be informed of the rapid advances being made by sister colleges. The last report of the State Board of Health of Illinois shows that there are now one hundred and fourteen medical schools which exact an educational preparation of intending matriculates, as against forty-five formerly. Forty-three colleges now require at least three courses of lectures, as against twenty-two formerly, and fifty-seven provide for a three or four years' graded course.

Sixty-three schools have now terms of six months or more. The following portion of Dr. Mann's address to the alumni would indicate that the sentiments of the faculty are all in favor of the higher medical education, but that there is a fear that in the adoption of a proper standard they would place the college too far in advance of the alumni. We quote :

"In our endeavor to raise the standard of medical education in our college, we ask your assistance, which you can give by urging your students to take a three-years' course, and by sending only those who are already well prepared in the preliminary education. Until there is some general law on the subject, or some community of action among the medical schools of the state, all attempts at raising the standard must be by slow degrees. We can go no faster than you will follow. It is with the practicing physicians of the state that the solution of the question lies. We, the faculty, are willing to go as fast and as far as we can get your support."

We earnestly hope that, at the next meeting of the alumni, a resolution will be introduced requesting the authorities of the college to make a three-years' course obligatory. We are confident that such a resolution would meet with almost unanimous favor, and, with this statement of the earnest "endeavor to raise the standard of medical education in our college," on the part of members of the faculty, it would appear to be only necessary for the alumni to assure them of their hearty support and sympathy in the plan. Undoubtedly, it would, for a time, lessen the fees which the professors would receive, but we would not for a moment believe that the loss of a paltry hundred or two of dollars would influence the distinguished members of the faculty against that which would be for the elevation of the college and the advancement of medical education.

The following gentlemen were elected as officers of the Alumni Association for the ensuing year :

President—D. W. Harrington; *First Vice-President*—E. L. Shurley, Detroit; *Second Vice-President*—J. H. Pryor; *Third Vice-President*—T. D. Strong, Westfield; *Fourth Vice-President*—E. N. Moore, Jr.,

Rochester; *Fifth Vice-President*—Peter Enweis, Ovid; *Permanent Secretary*—J. J. Walsh; *Treasurer*—E. C. W. O'Brien; *Recording Secretary*—J. W. Matzinger; *Trustee for five years*—F. E. L. Brecht; *Executive*—F. P. Vandenburg, H. H. Bingham, W. C. Callanan.

The commencement exercises were held at Music Hall; the pen of the reporter of one of our great dailies is here so facile that we give place to him: "It was a scene of unaccustomed brilliancy. Upon the stage, set as a library scene, were grouped the faculty of the College, the curators, and the speakers of the the evening; the three front rows of chairs were occupied by members of the classes in medicine and pharmacy; Wahle's orchestra was stationed inside of the railing, ready to interperse the eloquence of the orators with sweet music; a large collection of bouquets and floral pieces was displayed beside the canvas-covered steps leading to the stage, ready for distribution as soon as the diplomas had been awarded; the boxes were filled with the families of leading physicians, while stretched away to the very doorways on the main floor was a sea of faces, all lighted with pride and expectancy. After an orchestral selection, the exercises were opened with an eloquent prayer by Bishop Hurst."

The address by the Hon. Theodore Bacon, of Rochester, was worthy of his high reputation as an able and scholarly man. The following gentlemen then received their diplomas:

Edward L. Wood, Eden, N. Y.; Henry George Bentz, Buffalo, N. Y.; Arthur Lincoln Benedict, A. B., Buffalo, N. Y.; Charles H. Farrington, Holland, N. Y.; Ira C. Brown, Buffalo, N. Y.; T. Oliver Tait, Rochester, N. Y.; J. Frederick Haller, Jamestown, N. Y.; Grant H. Simonds, Shelby, N. Y.; Charles E. Sharp, Port Allegany, Pa.; Frank L. Cooley, Hannibal Center, N. Y.; Ransford C. Tabor, Tonawanda, N. Y.; Fred. A. Wicker, Moscow, N. Y.; W. Henry Woodbury, A. B., Stamford, Conn., Horace F. Smith, Allanburg, Canada; Charles D. McCarthy, E. Bloomfield, N. Y.; Marcenus Mason, E. Bloomfield, N. Y.; Oscar L. Harries, Buffalo, N. Y.; Alfred W. Smallman, Ellicottville, N. Y.; Charles B. B. Tweedale, St. Thomas, Canada; Charles S. Jones, Middlesex, N. Y.; Thomas Purcell, Lundy's Lane, Pa.; Geo. W. Gillette, Ph. B.,

Buffalo, N. Y.; Amos F. Blanchard, Jamestown, N. Y.; Edward Beck, Owego, N. Y.; Wm. E. McDuffee, Otto, N. Y.; Charles George G. Le Vesconte, Kingscave, N. F.; William McGregor Haynes, Beamsville, Canada; Charles Maynard Smith, Westfield, Mass.; Ellen R. Spragge, Guelph, Canada; Thomas H. Davidson, Buffalo, N. Y.; Horace J. Mann, Brockport, N. Y.; Frank B. Storer, E. Kendall, N. Y.; Herbert L. Smith, S. Rutland, N. Y.; Ava Melissa Carroll, Grant Station, N. Y.; Robert T. French, Jr., A. M., Rochester, N. Y.; Joseph Benjamin Finucan, Mendon, N. Y.; Hiram L. Knapp, Windham, Pa.; Elizabeth Fear, Dansville, N. Y.; Richard Henry Satterlee, Rochester, N. Y.; Charles H. Andrews, Bergen, N. Y.; Clark Edwin Ernest, Lockport, N. Y.; Edward Hadley Tweedy, Buffalo, N. Y.; Peter Cortelyou Cornell, Buffalo, N. Y.; Selina P. Colgrove, Salamanca, N. Y.

ALUMNI ASSOCIATION PRIZE.

An annual prize of two hundred dollars is offered by the Alumni Association of the Medical Department of the University of Buffalo for an original essay on any medical or surgical subject. The prize is open for competition to the Alumni of the Medical Department only.

Each essay must be signed by a motto, and accompanied by a sealed envelope containing the author's name and address, and bearing on the outside the motto with which his essay is signed.

The author and the subject of the successful essay will be announced, and the prize awarded, at the regular annual meeting of the Alumni Association.

The Committee reserves the right of not awarding the prize at all, if no essay of sufficient value is presented.

All essays should be sent to the Secretary of the Committee before January 1, 1889.

JOHN H. PRYOR, M. D., *Chairman*,

WM. H. THORNTON, M. D.,

DE LANCEY ROCHESTER, M. D., *Secretary*,

216 Franklin street, Buffalo, N. Y.

Committee.

ANNUAL CONVOCATION OF NIAGARA UNIVERSITY.

The annual convocation and meeting of the alumni of the Medical Department of Niagara University will take place in this city on April 10th. The exercises will take place in the morning, afternoon and evening. The morning session will be at the college building, and commence at 11 A. M. Professor Thomas Lothrop will deliver the address of welcome, which will be followed by the address of the president, Professor Floyd S. Crego. Immediately thereafter, the reception of new members will occur, which is to be followed by the election of officers of the association. The afternoon session will be of a medical character entirely, and, as will be seen by the programme, the committee have obtained men of prominence to take part in the afternoon session. It is as follows: Some of the Relations of Pathology to the Practice of Medicine and Surgery, by Frank W. Ross, M. D., Elmira, N. Y.; The Diagnosis of Contracted or Granular Kidney, by A. D. Lake, Perrysburgh, N. Y.; An Inquiry into the Importance of Physical Culture as a Branch of Preventive Medicine, by William C. Bailey, M. D., Albion, N. Y.; A Detailed Account of the Weir Mitchell Treatment, by Edward B. Angell, M. D., Rochester, N. Y. The convocation exercises will be held in the evening at Association Hall, Y. M. C. A. building. The address to the graduates will be made by Henry Flood, M. D., of Elmira, N. Y., this to be followed by a general address by Rev. J. T. Edwards, D. D., president of the Chamberlain Institute. The profession generally are invited to attend each of these exercises. The banquet, which follows the exercises, will be held at the Genesee hotel, and will be attended by members of the Alumni Association and their invited guests.

A TOXIC ALKALOID CONSTANTLY EXHALED FROM THE LUNGS.

Perhaps the most important medical discovery made during the past year is that of Drs. Brown-Sequard and D'Arsonval, who have demonstrated that a toxic substance, probably an alka-

loid, is constantly exhaled from the lungs of mammals. These scientists injected under the skin, in seven rabbits, from twenty to forty-four centigrammes of water obtained by condensing the vapor exhaled from the lungs of dogs. Four of the rabbits died within twenty-four hours, one in thirty-six hours, and the remaining two were still living, but very feeble, when the communication was made to the Academy of Sciences, January 16th. The symptoms generally produced were slowing of the respiration, increased rapidity of the cardiac pulsations, general paresis, and diarrhoea. *Post mortem* examination shows ecchymoses in the lungs, and the intestine filled with a yellowish fluid. After showing that this condensed pulmonary vapor had a toxic effect, the experimenters next endeavor to ascertain the nature of the poison, whether it is chemical or microbic. This was determined by boiling the condensed pulmonary vapor, under pressure, in closed flasks. In this way, all micro-organisms were destroyed, and the fluid thus sterilized was injected into rabbits without any diminution of the poisonous properties. Brown-Sequard even thinks that the toxicity was increased. They conclude, from the following facts, that the expired poison is an alkaloid resembling the ptomaines and leucomaines :

1. The pulmonary fluid containing the poison is alkaline.
2. The toxicity is not destroyed by heat or boiling in a closed flask.
3. From the symptoms produced when the substance is injected into the blood or tissue of rabbits.

The demonstration of the existence of this poison is of the greatest importance, and the discoverers promise to make some experiments showing the effects of the continued inhalation of small quantities, thus throwing new light upon the etiology of diseases thought to be induced by inadequate ventilation.

IN concluding his annual address before the Philadelphia County Medical Society, January, 1888, the president, Dr. J. Solis-Cohen, commented as follows on the relations of the profession to the public : " It is to be deplored, on the score of pro-

fessional ethics, that mention of some of our scientific work is occasionally noted unofficially in the public newspapers, despite the express interdiction in our by-laws. Whether this prohibitory clause be deemed judicious or not, it is plainly the duty of all members to accede to its behests. Those who disapprove of it should present their reasons for doing so in full meeting, and should endeavor to have it rescinded. They have neither the right to ignore it, on the one hand, nor the right to disobey it, on the other. On several occasions, when reporters of the daily press have been present at our meetings, they have assured me that they were present on invitation of a member; that they had no desire to intrude, and had believed that their presence would be agreeable to the Society. While there is no reason to doubt that much of the individual editorial advertisement of subjects discussed, or to be discussed at societies, or of operations performed, or to be performed, in public places or in private, is due to officiousness on the part of a student, a follower, an attendant, or a patient, there is equally good reason to believe that most of it is courted, directly or indirectly, by the individual most interested. Of this fact I have been amply assured by newspaper men, who have been my own patients, and to whom I have put the question direct. I have been assured, further, that it could be taken for granted that little matter of personal medical importance ever gains access to the papers without the knowledge of those most intimately concerned.

DR. FRANK H. POTTER, Lecturer on Laryngology in the Medical Department of Niagara University, has removed his office and residence to 273 Franklin street. This is a more central location than the doctor's former place, and the house is well adapted to carrying on of his especial work.

Dr. Edward Clark, formerly of Huron street, has also removed to 271 Franklin street.

Dr. Charles G. Stockton, Professor of Theory and Practice of Medicine in the Buffalo Medical College, has removed to 278 Franklin street. There are now eight doctors on this one block, and yet it is reported the neighborhood is healthy.

THURSDAY, March 24, 1888, was a cheerful occasion for many friends of the *Western Pennsylvania Medical College*, in Pittsburgh. The Grand Opera House was crowded with those on hand to extend congratulations, and to aid in commemoration of the second annual commencement. Thirty-four graduates received the degree of M. D., being an increase of exactly fifty per cent. above last year's number.

WE take pleasure in calling the attention of our readers to the advertisement of Messrs. John Wyeth & Bro., on page 4. The new remedies they bring forward in the form of their compressed tablets will be of interest to every physician. The circular matter they offer to supply is very concise, and collated with much acumen, and shows an evident thorough knowledge of the therapeutic value of these recent valuable antipyretics and antiseptics.

Book Reviews.

Atlas of Venereal and Skin Diseases. By PRINCE A. MORROW, A.M., M.D., Clinical Professor of Venereal Diseases, formerly Clinical Lecturer on Dermatology in the University of the City of New York; Surgeon to Charity Hospital, etc. Wm. Wood & Co., 1888; J. H. Matteson, 16 East Eagle street, Buffalo.

Wm. Wood & Co. have furnished to the profession a great many valuable works, and they assume the most important and expensive undertakings with a boldness founded on years of successful experience. In the preparation of this Atlas, they have enlisted the co-operation of the leading dermatologists and syphilographers of the world. Prominent among them are Profs. M. Kaposi and I. Neumann, of Vienna. The atlas of the former, of venereal diseases, just completed, and that of the latter, of skin diseases, now being issued in parts, will be largely drawn upon in the preparation of this work, the sole right to reproduce them having been obtained by this enterprising firm. Among other distinguished gentlemen who have engaged to contribute selections from their collections of original illustrations, may be mentioned: Dr. J. Hutchinson, of London; Profs. A. Fournier

and A. Hardy; and Drs. Ricord, Cullerrier, Besnier, and Vidal, of Paris; Prof. Leloir, of Lille; Dr. P. A. Morrow, of New York; Dr. E. L. Keyes, of New York; Dr. Fessenden N. Otis, of New York; Dr. J. Nevins Hyde, of Chicago; Dr. Henry G. Piffard, of New York, and others. The author of the work is Dr. Prince A. Morrow, of New York, who, in addition to plates contributed from his own remarkable collection, will write the treatise on skin and venereal diseases, which constitutes, besides the description of the plates, the text accompanying them. Particular attention is given to the common forms of skin diseases, and included in it, not only as a valuable independent feature, but also as a practical means of differential diagnosis, are the eruptive fevers, as rubeola, scarlatina, erysipelas, variola, varicella-vaccinia, etc., not found in any other work of the kind. The publishers announce that the "Atlas of Venereal and Skin Diseases" will be published in fifteen imperial folio parts, at the very moderate price of \$2.00 a part. The entire work will contain seventy-five superb colored plates, executed in true chromolithographic style, exquisitely printed in flesh tints and colors, containing several hundred figures, many life-size, together with descriptive text for each plate, and from sixteen to twenty folio pages of a practical treatise upon venereal and skin diseases; the whole forming one magnificent thick imperial folio volume. We have received the first two parts, and we have only to say that in these the promises made in the announcements of the work are splendidly fulfilled. This Atlas bids fair to be the most superb work of the kind in medical literature.

Atti della Reale Accademia Medica di Roma, 1886-1887. (Transactions of the Royal Academy of Medicine of Rome.) Tipografia Fratelli Centenari, Roma, 1887; pp. 340, 4to.

In no other country of Europe is better or more thorough work being done for the advancement of medical science than in Italy. It is in the departments of microscopical anatomy and pathology especially that the Italians excel. The universities and the Royal Academy of Medicine being under the patronage of the crown, are able to do thorough work and publish results in excellent

form. The present volume is a beautiful specimen of typographical work, illustrated by eighteen lithographic plates, many of them in colors. The following are the contents: (1) Brain and Skull of a Microcephalus, by G. Mingazzini and O. Ferraresi; (2) Catarrhal Pneumonia resulting from Pneumothorax, by Giuseppina Cattani; (3) Anthropology of Tierra del Fuego, by G. Sergi, Professor of Anthropology in the University of Rome; (4) On the Ossification of the Periotic Capsules in Man and other Mammals, by E. Ficalbi; (5) Anatomical Observations on the Crania of 75 Lunatics, by Giovanni Mingazzini; (6) Minute Anatomy of the Ovary Body in Man, by Livio Vincenzi; (7) On the Normal Development and some Alterations of the Human Skin, by Sebastiano Giovanni; (8) A Case of Glanders in Man, by O. Ferraresi and G. Guarnieri; (9) Immediate Union of Wounds of Stomach in relation to various forms of Suture, by A. Poggi; (10) Researches on some Cystocerci of the arcolar tissues, by C. Crety; (11) Investigations of the Alterations of the Liver in Malarial Diseases, by G. Guarnieri; (12) On Phlegmonous Gastritis, by O. Ferraresi; (13) On Malarial Infection, by E. Marchiafava and A. Celli; (14) The Vasomotors and Vasomotor Centers in the Spinal Cord and Brain; the Vasodilator Nerves in the Posterior Roots of the Cord, by Pietro Bonuzzi.

Du Catarrhe Chronique Hypertrophique et Atrophique des Fosses Nasales, de L'Ozène, Obstruction Catarrhale des Trompes D'Eustache, et Vegetations Adenoides du Pharynx. (Chronic, Hypertrophic, and Atrophic Catarrh of the Nasal Fossæ, Ozæna, Catarrhal Obstruction of the Eustachian Tubes, and Adenoid Vegetations of the Pharynx.) By DR. GARRIGOU-DESARENES, Professor of Otology and Rhinology. Paris: Adrien Delahaye et Emile Lecrosnier. 1888. Pp. 240; 8vo.

This elaborate work is written from a purely therapeutic point of view, the author advocating, in the majority of cases, the use of the galvano-cautery and electrolysis, a method of treatment originated by this distinguished French rhinologist. The work, however, is a complete treatise on rhinology, the anatomy and physiology of the parts; the instruments employed and methods of rhinoscopy being described in part first. Part second discusses the pathology of the naso-pharynx; part third is devoted to treatment of the lesions by ordinary methods, and

by the chemical galvano-cautery ; while part fourth is devoted to reports of cases, observations and statistics. While the work is too elaborate for the general practitioner, we believe that the specialist will find it of the greatest value, and well worthy of translation.

A Practical Treatise on Diseases of the Skin. By JOHN V. SHOEMAKER, Professor of Skin and Venereal Diseases in the Medico-Chirurgical College and Hospital of Philadelphia, etc., etc. With colored plates and other illustrations. New York : D. Appleton & Co., 1888.

The author of this book is one of the well-known dermatologists of this country, and has had exceptional opportunities for observation and study in his special department. These advantages have enabled him to prepare a book admirable in its clearness of description, conciseness and thoroughness. Dr. Shoemaker has introduced into the treatment of skin diseases many of the oleates, and, consequently, we find that these preparations receive much attention and are highly lauded. That they are important additions to our resources, is generally admitted, but we think the author often overestimates their value. Under the treatment of favus of the scalp, for instance, we find him depending upon the application of oleate of mercury or copper, and referring to the treatment by epilation as "barbarous." Other means of treatment are, however, not ignored, and as a whole the work deserves high commendation.

The Hygiene of the Skin, or the Art of Preventing Skin Diseases. By A. RAVOGLI, M. D., Cincinnati. Central Medical Publishing Co., 1888. Price, \$3.00.

This is essentially a treatise on diseases of the skin, in which particular attention is given to etiology and prevention. It contains much valuable matter not found in the numerous excellent works already in the hands of the profession. It is a book of over 400 pages, and in this necessarily short notice we can perhaps give our readers the best knowledge of its value by giving the titles of its chapters. Chapters I. to IV. are devoted to the skin, its anatomy, its functions, and the effect of morbid impressions. Chapter V. is devoted to the diatheses, and

VI. to the skin diseases which are produced by a particular virus or virulent impression. VII., VIII. and IX. consider physiological individual conditions, Eruptions produced by remedial or poisonous substances. Influence of diet, External causes of skin disease, Influence of water upon the health of the skin, Cosmetics, Influence of clothing in the production of skin diseases, the Hair, and a chapter on the Parasites, complete the titles of the eighteen chapters of the book. The illustrations are fairly good, and the work, as a whole, is deserving of commendation.

Lectures on Diseases of the Heart. By ALONZO CLARK, M. D., LL.D., Emeritus Professor of the Principles and Practice of Medicine, College of Physicians and Surgeons, etc. New York: E. B. Treat & Co. 1887.

This work of the late Dr. Clark embodies the more important of the clinical lectures which, for many years, he gave in the hospital amphitheatre and lecture-room. Hundreds of his former pupils will thank the publishers for putting them in a permanent form. Few teachers have been endowed with so clear and concise a style of delivery. In discussing the pathology and diagnosis of cardiac lesions, the author is particularly clear. We consider this work, the result of half a century of clinical experience and study, to be one of the most valuable contributions to the literature of cardiac diseases ever produced in America.

Obstetric Synopsis. By JOHN S. STEWART, M. D., Demonstrator of Obstetrics, and Chief Assistant in the Gynecological Clinic of the Medico-Chirurgical College of Philadelphia; illustrated. Philadelphia: F. A. Davis, publisher. 1888. Pp. 200.

This little work belongs to the "Physicians' and Students' Ready Reference Series." It is well written, excellently illustrated, and fully up to date in every respect. Here we find all the essentials of obstetrics in a nutshell; anatomy, embryology, physiology, pregnancy, labor, puerperal state and obstetric operations, all being carefully and accurately described. In an appendix is given the obstetrical nomenclature adopted by the Obstetric Section of the Ninth International Medical Congress, of 1887.



VOL. XXVII.

MAY, 1888.

No. 10

Original Addresses.

ADDRESS TO THE GRADUATING CLASS OF THE MEDICAL DEPARTMENT OF NIAGARA UNIVERSITY.

By HENRY FLOOD, M. D., of Elmira, N. Y.

Most Worthy Chancellor, Ladies and Gentlemen:

The diploma which has been conferred by this University upon you, gentlemen of the graduating class, gives you a legal right to commence the practice of medicine. It certifies to the public that you have pursued such prescribed courses of study, and have passed successfully such rigorous tests, that you are proved to be worthy to be members of the brotherhood of the profession of medicine.

The laws of this college make the work of preparation for the honors of this day so long and so thorough, that the degree of M. D. is not to you an unmeaning title.

When you received the degree of "Doctor of Medicine," you surrendered, to some extent, your student's life, and commenced a new and very different one.

Judging from the exhaustive examination which you have passed before the Board of Examiners to-day, I know that you are far better prepared than most beginners, and I assure you that the better the foundation you have laid as a student, the more

rapid and successful you will be in rearing the superstructure of a physician's life.

When I say you surrender to a certain degree your student's life, I mean to a limited degree only; for, if you desire to compete successfully with other practitioners, and keep abreast of the progress of medical sciences, you must always be students, and hard students at that.

The first years of your professional life, before you have established a reputation and acquired a large practice, will afford you golden opportunities to broaden and perfect your medical education.

In after years, when you have acquired a large practice, the urgent duties of your profession will make study both irregular and difficult. Neither interruptions nor overwork can be avoided, and when you come home wearied, it will not be easy to turn to your books, and concentrate your distracted thoughts on some medical subject; nor will you then feel inclined to read many pages of chaff in order to sift out a few pages of wheat.

You must not assume, because you have your degree and have been good students, that you know it all. I will tell you now, you will never know it all.

I adjure you not to commence life with the conceit of some graduates—that they know just a little more than anybody else—for if you do, the day is not far distant when you will find, to your mortification and chagrin, that some old and seedy-looking doctor will be able to see you and go you one or two better.

You should remember, too, that you have been studying only the theoretical part of medicine. You may have your rules learned, word for word; you may be able to name every bone, muscle and ligament in the body, to give the symptoms of every disease; but, when you come to apply your book knowledge to certain cases, you will often find yourself sadly confused.

You must now begin to apply yourself to studying cases. The practitioner who has the most experience, and knows how to utilize it, is bound to be successful.

The most successful, however, are those who always remain students, adding every year to their stores of professional knowl-

edge, and utilizing these fresh acquisitions according to the dictates of judgment and the guidings of experience.

There are some practitioners who, as soon as they glance at their patient, see instantly whether or not he is better, and are very seldom in the wrong in this first impression. Their practical knowledge, experience and skill have taught them what no books can teach.

Some men thus know, intuitively, what others can gain only by hard labor. They are naturally adapted to the practice of medicine, and their work is easy, gratifying and successful.

When you begin your work, take time to investigate your cases, to analyze their symptoms, to devise a methodical way of attending to your business, and to hold yourself to a thoroughness that will give you close insight into your practice. Such a beginning will give you a splendid experience, the great teacher in all professional life.

The habits a physician acquires in the first years that follow his graduation, will stay with him through life, and determine his professional character.

If you are careless and slipshod in the beginning, you will generally remain so. If you are careful and methodical, these habits will assist you later on, when time becomes very valuable, and when your wits are taxed to so economize it that you can attend to the pressing demands of a growing practice.

To the busy physician, economy of time is one of the great problems that is always staring him in the face.

If you desire to be successful, you must attend to your business faithfully and diligently, and never neglect a case. Negligence, in the eyes of the law, is a criminal offense.

Many a physician who has been sued for malpractice has lost the accumulation of a life-time by having neglected one patient. The law holds that the general practitioners need show only ordinary skill and knowledge in the treatment of a case; but nothing will excuse even the most skillful, expert and educated physician, if it is proven that he has been guilty of negligence.

Let me now call your attention to what seems to me one of the most important matters for your consideration—that is, your charges.

The services you render society, ministers to its good, and deserves compensation. The service is often laborious, difficult, unpleasant, and always requires years of previous study; such service is not mere manual labor, and it may reasonably ask for high compensation.

Most physicians, sooner or later, have families that are dependent on them for support; and how many widows and orphans have been left by physicians nearly poverty-stricken, simply because he who ought to have been their provider, was a careless collector and a poor business man, and, for the sake of others, really sacrificed his wife and children. Every physician should so provide for his family, that, in the event of his death, he should leave means for their support in a manner suitable to their station in society.

Many physicians become so absorbed in their profession, that they neglect their accounts, lose many bills which could be collected, and let their finances run so loose, that when they die, their accounts are so mixed that they are nearly worthless.

From a logical standpoint, there is no reason why a physician should not receive pay for what he does.

The ordinary practitioner is not a missionary—not a member of a charitable fraternity. He is a civilian, and it is his legal and moral duty to support himself and those dependent on him. He has no more right to give away his time than a grocer his goods, or a baker his bread.

Some say it is severe for a physician to refuse to attend a suffering man because he has no money. The grocer and the baker are not asked to feed the starving. They send them to the city and county authorities for necessary food, fuel and clothing, and they say that they contribute their share towards the support of the poor in the taxes which they pay to the community. So does the physician, as a good physician, pay his share, and, as a good husband and father, he should refuse the imposition of paying more.

•

I would not advise any physician to go as far as the grocer or the baker, nor would he be justified in so doing by public sentiment; for, a profession should rise above the mere basis of making money.

A profession is something more than a mere business. It has honorable obligations of public service far higher than the precept of the store and the shop.

The deserving poor very seldom suffer for the care of a physician, for all of us are charitable enough to give them our time, money and services, and I doubt that you, any more than I, will let any person in actual need suffer.

There is, however, a class that will live better than you, indulge in luxuries that you will not even think of, dress better than you, who will never pay you their bills. They are not charity patients. They are dead-beats, and they beat no one more than the physician.

They are unreasonable, exacting; claim your constant attendance; call for you unnecessarily at night. Why? For it matters little to them whether or not they have a large bill, for they have no idea that they will ever pay it, and when you ask them for your dues, they turn upon you with criticism and abuse, and trump up some excuse for the avoidance of your just claim.

They live beyond their means. They use fraudulently the money that belongs to others. What you have earned by hard labor, they dishonestly withhold, and spend for their own gratification.

When you have a bill against a man, and cannot collect it, and you see this man or his family wearing better clothing than you, or if you see him attending the theater, there is something wrong about him, for if he can afford to wear fine clothing, and dress his family extravagantly, he can afford to pay you. If he has money enough to buy theater tickets, he should pay his debts. If he can smoke good cigars, and spend money treating his friends, he should pay his doctor's bill. If he calls on you, it is unmistakably your duty to refuse to attend him until he settles his accounts.

This class—not a small factor of our community—will not pay you if it can be avoided, but if they find that they must pay, or not receive your services, many will be honest by necessity, while others will hasten to the doctors who will stand beating.

I can recall a physician who recently died, that was very economical; neither drank, smoked, nor spent money in any manner for luxuries. He had practiced forty years, and had a very extensive business. When he died, he left only five or six thousand dollars to his wife and family.

This man gave away the larger portion of his life's work. His family were left with a scant support, while some of his creditors lived in luxury. I do not hesitate to assert, that if I should try to raise a hundred dollars for a monument for this worthy man's grave from those that were owing him, I would find there would not be enough gratitude in their selfish hearts to contribute towards it a paltry dollar.

It is no charity to give to such persons your services. Your time and strength are too precious to waste on such dishonest and ungrateful wretches. When you do it knowingly, you encourage dishonesty, and are doing yourself, your family and your profession a dire injustice.

I advise you to collect your bills often, and to have a settled system to your finances. When you are unable to collect from certain persons, find out the reason.

If they are honest, industrious and frugal people, and from some ill-luck are unable to pay, balance the books, and charge it up to charity. But if these creditors are idle, extravagant and dishonest, and will not pay you, follow them up relentlessly, with every means that the law provides for your protection.

You are beginning a life in which you will be able to benefit society in ways almost innumerable. If conscientious and patient, you can make your character and influence felt in the house of the rich and poor alike. A good physician, who is a good man, will soon become an influential citizen, and a powerful factor of the community in which he resides, and will win from the public a large measure of respect for his profession.

On the other hand, a physician who is a bad man, is a dangerous man in the community, and can do an immense amount of evil. Such a person not only drags himself down, but causes a general loss of respect for the profession at large, and subjects the honorable practitioner to annoying and undeserved suspicions.

Physicians should be brotherly in their treatment of each other, and avoid in every way unjust criticism, and even when they believe that another physician has erred, they should remember their own fallibility, and avoid, by a judicious silence, wounding the brother's fair name.

It is not honorable to assail anyone's professional reputation by rehearsing to your patients or the public his faults or failures.

The old saying that "doctors always disagree," is too often true. Why? Because they necessarily differ about small details, and some talk so much about these petty affairs, and exaggerate these small differences, that they make mountains out of mole-hills.

Whenever physicians publicly quarrel with one another, the spectacle may be very amusing to people who enjoy witnessing rows—neighbors may urge them on—but you may rest assured that the principals in these professional duels will gain nothing in the esteem of intelligent men and women; but that each will suffer in professional dignity and influence, while often the contest ends in making all concerned the laughing stock of the community.

So it is when the members of the regular practice of medicine take it upon themselves to belittle the practitioners of other schools. The law recognizes them, and the people have good reasons for believing that all physicians have equal rights, and consider your criticisms to emanate from a narrow-minded jealousy. There is no good reason why you should degrade yourselves by following them up with petulant and malicious abuse. Tirades against another school of practice will never strengthen the standing of our own. The common sense of the people estimates these things generally in their true character,

and judges the man who indulges in them as a professional scold and a weak mischief-maker.

There are two extremes that practitioners are in danger of rushing into; one lies in the line of an ambition to keep abreast of the times.

This is certainly a laudable ambition, and one of the conditions of any great success; but if not restrained by good judgment and sound discretion, the practitioner will rush wildly from one new remedy to another, never trying any kind of treatment long enough to become thoroughly acquainted with it.

In cautioning you against this temptation, I would advise you, when you find a treatment that is good and reliable, adhere to it as you would to a well-tried friend. Don't desert it for a new one, unless you, by several trials, have proven it to be the better of the two.

On the other hand, there is a greater danger: that is, of getting into a rut, or riding a hobby.

A man who gets into a rut, or rides a hobby, cannot be a very successful man, for his energetic neighbor will run away from him, while he is dreaming over the same old dream.

I knew a professor in a college who had only two remedies: Iodide of potash and quinine, and gave them alike for all diseases. Another, who very seldom gave any other remedy than a hypodermic injection of morphine.

I once had an old physician visit me, who was a finely-educated and accomplished gentleman. He accompanied me on many of my visits. Nearly every time we left a house of a patient, he would try to convince me of the great virtues of calomel, and he thought I was a very poor practitioner because I did not give it to every patient I had.

I soon learned from him what I did not know before—that calomel has an excellent effect in a certain class of cases, but I also learned what, with all his education, he seemed not to know, that in other cases it does more injury than it does good.

Finally, gentlemen, I will end my sermon by advising you to be true to yourselves, to the dignity of your profession, and the honor of your manhood.

Honesty will assist you more than anything else in obtaining your patients' confidence and respect.

Never deceive them, for when a physician once gets the reputation of magnifying his cases, or of concealing their real seriousness, his words either way will have little weight, and at last the lie will defeat itself.

Always endeavor to do what is right, and practice the golden rule both with your professional brethren and your patrons.

Attend with all diligence to the business that you have, and keep abreast with the progress of the medical sciences. If you do, I have little doubt but that you will succeed in the noble work you are about to commence.

May years of usefulness and smiling fortune await you. May the honorable service you shall render to suffering humanity be rewarded with all the generous compensations of money, fame and gratitude that your labors shall deserve.

ADDRESS ON MEDICINE.*

By JOHN CRONYN, M. D.

President State Medical Association, Professor Principles and Practice of Medicine and Clinical Medicine, Niagara University.

"As agriculture, to those who are in health, holds out the expectation of aliment, so medicine promises to the sick a recovery from disease:" Thus wrote Celsus 1800 years ago, and so may it be written to-day, with this difference, that in both a more enlightened measure is used to determine their success. The *gourmand* requires his dishes delicious and many, the fulness of his desires being satisfied only in the filling of his stomach. The *gourmet*, more dainty, delicate, and capricious in his longings, makes his demands with equal assurance that he, too, will be gratified: and why not? Do we not see the hillside, the valley, and the fallow made tributary to their wants? The plough, the harrow, and the roller are to service put. The

*Read before the N. Y. State Medical Association.

trench, the furrow, or the ditch is used, as best may accord with finest production of the food required. And when too frequent use of the once virgin soil necessitates a dressing, like an ill-conditioned ulcer, behold, at once, the fertilizer there: its fruit is forthwith seen, agriculture its promise keeps, and health moves on through ailment.

Does medicine do as well? If not, why? To give a history of the progress of medicine—adopting the chronological order into which it is most commonly divided, viz., from the earliest records we possess to the decline of Roman literature, from this period to the revival of letters, and from the introduction of the inductive philosophy to the present time, would no doubt, to many, be exceedingly interesting, if not profitable. It will be sufficient for my purpose, however, to but succinctly refer to a few of the characteristics of the earliest periods, and deal more in detail with subjects nearer our own time.

Mentioning the history of the science in its earliest records, it will suffice to remark that in proportion to the progress of civilization, greater and more active means were being constantly invented for the cure or alleviation of diseases, or for the repair of injuries to which the body is ever prone. These were directed almost entirely by the observance of such consequences as appeared from natural causes, or were due to certain kinds of food causing an elimination of such peccant substances as were supposed to produce disease. And so, too, with regard to injuries, for at this early period the value of excluding the wounded part from the air, and of the application of graduated pressure, was recognized; and these means were used to serve their purposes as now, and might be called the ancient method of antisepsis. In France, Germany, Italy and Great Britain, men of genius and learning were not wanting who put forth theory after theory, principle upon principle, and experience surmounted by observation. Under the ægis of one or the other leader were disciples in great numbers, who in their turn lived but to upset the doctrines of their masters, and, announcing something new, to fall like the others before the tide of advancing knowledge in phil-

osophy and inductive reasoning, coupled, however, at all times with that ever-present antagonism of opinion, begotten of hatred and envy, to be found nowhere else to the same degree as in the profession of medicine. He who may find time to consider, after the manner of the historian, the changing features of opinion and doctrine I have indicated, will discover that here and there those subjects of greatest utility as a basis of correct practice were found most prominent in the theories and speculations of this or that writer—his reasoning, experience, and observation having always in view “the promise to the sick that their disease should be removed.”

Coming to our own times, the conflicting opinions long in vogue embarrass and retard; for, unlike every other branch of science, our actual information does not increase at all proportionately to our experience; and, although truth is not to be attained in any science without much labor and research, yet, for those willing to bestow time and attention, it is, for the most part, attainable; or if, in the investigation, it elude our grasp, the reason is manifest. In other sciences, too, when we enter upon an inquiry, or propose to ourselves any definite object of experiment or observation, we are able to say whether the result has been satisfactory, whether the end sought was reached. Not so in medicine, for there are many peculiarities necessarily connected with the subject which render it extremely difficult to appreciate the value of experiment and observation. Can anything better elucidate this than the changing doctrines and practice of olden time, to which I have before alluded, and the progressive changes due to that want of certitude, or common consent to the results of experiment, even in our own day? But a few years ago, the whole medical world was divided in opinion as to whether the human constitution had undergone a complete transformation, or disease had changed its type, the basis of opinion being observation, experiment, and the experience of actual practice. The most potent agent in the therapeutics of our forefathers—bleeding—was no longer thought compatible with the cure of disease; stimulants, tonics and food met with greatest favor in the

philosophy of one party, while expectant patience, with nature's own efforts, seemed to satisfy the other. Did we have a change of type in disease, or that other transformation? Neither; but just then new light shone upon the scene—pathological inquiry solved the doubt, as much as might be, for the time, and onward in its progress to certitude, must present medicine in a more scientific phase. Certitude, thanks to workers in every part of the universe, is being eagerly sought. The laboratory, the microscope, the test-tube, find interpretation for doubt or uncertainty in hidden or obscure disease; the dog, the cat, the rabbit, and the frog, are made to contribute their quota to this fast-acquiring certainty; and, although one can see, read and hear as of old, that satisfaction is not proved to all the dissidents, but add their mite to that truth that sooner or later must prevail, when medicine shall keep its "promise to the sick."

To physiological research, more than to any other, are we indebted for some of the greatest triumphs in modern medicine, reflex action, cerebral localization—marvels of discovery, utility, and application. Ere long the cause of, or the organs involved in, the production of fever will have been discovered, when no longer we shall grope in the dark, nor be governed by contradictory opinions, but shall have a clear and valid elucidation of the facts observed, through our knowledge of the physiological functions invaded by that uncertain or unknown quantity called disease. Pyrexia and hyper-pyrexia will be explained by laws proven to belong to the ganglionic system of nerves in a state of pathological perturbation; and this disturbance will be accounted for by recognizing the germ theory of disease, by consenting to a *casus belli* in the economy between the different tribes of bacteria (and thus prove the cogency of the Darwinian theory of the survival of the fittest), or by accepting the fact that the body, in a susceptible state, from a great variety of causes, receives, through air or food, or generates within itself, some septic poison that interferes with the normal function of some special ganglionic center, which readily resents the encroachment upon its duty, and repels with force of cold and heat the direful enemy. This,

and much more, physiological experiment will bring about, and make more certain and useful that actively worked field of pathological research which has for its object a more definite explanation of the origin, propagation, and mode of communication of disease. In this effort, no fault can be found, though laborers are many, work so extensive, and the lines of investigation, as well as subjects, widely different—not, therefore, the less interesting, on the whole. The value of this ardently cultivated department of medicine would, however, be greatly enhanced if there were a better consensus of opinion among the many workers. It would be a guide of greater certitude at the bedside, where the judgment should be without doubt, the action consequently wise, and the result satisfactory.

Notwithstanding that the data of physiological experiment indicate a great advance upon former times, being in possession of so many means of research not heretofore known, much greater results are expected of it in the future. It *must* establish the existence or non-existence of inhibitory centers, of trophic centers, of heat and other centers, of vaso-motor, constrictor-dilator nerves, exercising or not the functions now attributed to them through these or other centers of the cerebro-spinal system. So, too, pathology, which has so exalted an errand to perform, will be, *must* be, cultivated with a view to establish that consensus of opinion referred to, and so much to be desired. It is not enough that the school of biologists and pathologists asserts that all communicable or contagious diseases are due to bacteria and allied organisms—it must be proved. It is not enough that great and talented cultivators in this field have labored earnestly, and, mayhap, honestly, to discover the true theory of pathogenesis; that they have solved the difference between spore and germ; and have given us a classification of micro-organisms that, to themselves, may be of easy comprehension, but, to the large proportion of practical men, of no value, because not proving such micro-organisms to be the source from which disease arises. Yet how loudly is it proclaimed in the general cry for antiseptics.

Assuming that this inquiry has been rather to ascertain the

multiplicity of the tribes of cocci, bacilli, bacteria, etc., than to elucidate with any useful certainty the cure or prevention of disease, is it not necessary, is it not imperative, that they shall give us laws governing their doctrines that we can utilize? Of what avail that we recognize the tubercle bacillus, the cholera microbe, *et genus omne*, if we can make no use of this knowledge to keep our promise to the sick? An innocent swelling is threatened with some malignant metabasis: has pathological analysis pointed to the therapeutics of prevention? Here is the key to what is required of pathological investigation—to the end that the *materia medica* may subserve its purposes in the cure of disease, the *summa* of our calling.

Where does therapeutics stand in its relation to advancing time? The *materia medica* has undergone great changes; chemistry and pharmacy have altered the crudeness of the medicines of by-gone days; and pharmacology, though of recent growth, will displace empirical methods which, in all time, even to this present, have him who used them prudently most faithfully served, and supply instead the rational.

When, as we know, how amyl nitrite the pangs of angina pectoris allays, so shall we know how digitalis regulates a weak and irregularly beating heart; how strychnia to the nervous system stimulus and tone doth bring; and phosphorus waste of its elements restores. Quinine—we know it aye cures, but how? Not yet a satisfactory explanation, though guesses are innumerable. Iodide of potassium and mercury, of deobstruents most potent—upon what principle and through what source we should positively know. The discovery of ether and chloroform might be considered chief among the evidences of advancing knowledge in this department, for, as boon to man and beast, no greater can be found; and so with many more. There are diseases, however, of which we learn a great deal through pathological histology, but know nothing of their appropriate medicines. This opprobrium of our art must disappear before the more accurate knowledge obtained through pharmacology, which now, like the other branches of medical science mentioned, is being cultivated with

great hope of reaching a precision that will be hailed with delight by the practicing physician.

Having indicated a general progress in physiology, pathology, and therapeutics, from earliest time to the present, and pointed to the urgent necessity of its continuance, I might be expected to suggest a means to the fullest possible accomplishment of our desires. It is summed up in a few words: Select from the many who would study medicine those already trained in letters and the arts collateral. Inspire them with a deep reverence for their profession and a keen sense of its awful responsibilities, and impart to them, then, through fitted teachers, and for five long years, such knowledge of medicine as will enable them to further its highest development, so that "as agriculture, to those who are in health, holds out the expectation of aliment, medicine shall promise to the sick a recovery from disease," and keep the promise.

Original Communications.

*THE DIAGNOSIS OF CONTRACTED OR GRANULAR KIDNEY.**

By A. D. LAKE, M. D., Perrysburgh, N. Y.

Mr. President and Gentlemen of the Alumni Association:

The subject of my paper is the diagnosis of contracted or granular kidneys.

Among the more important diseases demanding our attention in practice, there are several, and this among the number, where our means of forming a certain early diagnosis are very limited. It seems to me this becomes a matter of serious import, when it is apparent that any large degree of success we may hope for in treatment, depends upon an early discovery of the conditions present.

* Read before the Alumni Association of the Medical Department of Niagara University, April 10, 1888.]

Only within a comparatively few years have the different forms of kidney affection, first described by Richard Bright, and receiving the name of that illustrious investigator, been distinguished in medical literature, or in practice, the one from the others. Even at this time, to some extent, the term Bright's disease, or chronic albuminuria, is made to cover, generally, chronic nephritis, contracted kidney, and lardaceous disease, when, as a matter of fact, not only the clinical history, but the pathological conditions, are so far dissimilar as to fully warrant an entire change in the nosology.

One important point in the differentiation of these diseases consists in the ease with which we recognize the existence of two of them, and the great difficulty, from the obscurity of symptoms, in determining the existence of the other, until a late stage in its progress is reached.

The symptomatology of chronic nephritis, and of amyloid degeneration, is so well pronounced and characteristic, that a diagnosis is readily made at any period of the disease; but, on the other hand, contracting kidney is an affection so insidious in its approach, that it may have reached a serious degree of development before the patient becomes aware of any kind of symptom, that his health is in any way impaired. No doubt, patients die suddenly of this disease, or after a short illness, preceded only, but perhaps for a long time, by slight derangements of the digestive organs, apparently so trivial, that they have not sought medical advice.

I believe that many of those obscure cases, resulting fatally, in which we are unable to arrive at a positive diagnosis, are contracted kidney, and I also believe that many cases of fatal apoplexy are preceded, perhaps for years, but unrecognized, by this disease.

Ziemssen says: "In the larger proportion of cases, striking symptoms, indicative of the disease, precede its fatal termination, and are occasionally prolonged over a period of several years. It is, undoubtedly, in most of cases, a disease of long duration, and it must have existed for some time before a certain diagnosis can be made. It is very likely the first beginning is never discovered."

Permit me to call your attention, briefly, to the more common symptoms, taken in the order of their observance :

1. Increased quantity of urine, which in no way seems to depend upon the quantity of fluid drank, and is at all times persistent throughout the disease, existing sometimes to such an extent as to lead the patient to think he has diabetes. This condition is an important factor in the diagnosis of contracting kidney.

2. Attacks of palpitation, vertigo, and difficulty of breathing, which are probably due to enlargement of the heart. One is quite likely, on discovering this condition of the heart, to bring his investigations to a close, and be satisfied with a diagnosis of valvular disease, until the appearance of more characteristic signs cause him to change his opinion.

3. Headache. This is an early symptom, and very persistent, not usually severe, and the patient seems to get accustomed to it, so far that he may not complain of it, but, when asked, says he has headache, and has suffered from it for a long time.

4. Sleeplessness. In the cases coming under my observation, this was a very prominent symptom: The patients often going to sleep readily on retiring, but awakening to pass urine, finding themselves unable to go to sleep again.

5. Disordered vision, probably not occurring until the disease is well advanced.

6. After the affection has reached a certain stage, but before this it may have existed for years, disorders of digestion make their appearance. The appetite fails, and the patient has severe pain after meals, and acquires a strong dislike for a meat diet. In no other disease is there such entire deprivation of relish for food, patients frequently being nauseated at even hearing the preparations for meals.

At this period the most troublesome thirst exists.

Following the disordered digestion, ensue emaciation, anæmia, and loss of strength, the skin assumes a dirty, faded color. In most of cases, the disease reaches this point before the patient becomes aware that he has any serious sickness. His spirits now become low ; he is gloomy and moody.

Most patients do not exhibit any dropsy throughout the disease, but in many cases, by careful examination, slight œdema may be discovered along the spine of the tibia, or about the ankle. Diarrhœa and vomiting are apt to occur in the later stages. This condition is quite likely to be followed by uræmic coma, terminating in death.

An examination of the urine, in contracting kidney, is very apt to be misleading. Throughout the whole course of the disease, urine is occasionally, and for a short time, excreted, which, in all respects, is like that secreted by healthy kidneys. The urine is always increased in quantity, and this is more marked during the night than during the day. The color is pale yellow. The specific gravity is below normal. The reaction is slightly acid. Albumin is irregularly present in small quantity, frequently requiring delicate tests and most careful manipulations to discover its presence. At times it entirely disappears—this is very likely to be the case if patients are in bed any length of time—to again make its appearance when they are up and moving about. The urine deposits only a very small amount of sediment.

But little aid in diagnosis is to be expected from the use of the microscope, except it be in the very last stage of the disease. Possibly, before this time, a few scattered hyaline casts may be discovered.

I have gone rapidly over the more pronounced and prominent symptoms of contracted kidney, for the purpose of comparison of the same with the condition present in the following case in practice:

Mrs. C., age sixty-eight. I had seen her occasionally for two years before the conditions herein narrated existed, being called upon to prescribe for vertigo and congestive headaches. She had, twice I think, fallen while at work, remaining for a few minutes unconscious. I was inclined to regard these attacks as threatened apoplexy, and prescribed accordingly. I am certain now that the predisposing cause of the attacks was either commencing, or existing, granular degeneration of the kidneys. In November, 1885, she began to lose strength and appetite. I had not given

her case attention for several months, but was called to see her at this time. She was pale and anæmic, troubled with difficult breathing, upon making any extraordinary exertion. Her skin presented a pale and sallow appearance. Her headache had been for some time unusually severe, and she complained of her inability to read, because, as she said, the "words all ran together," and spots appeared before her eyes. Her appetite was so very poor, that it was with the utmost difficulty she could be induced to eat anything. This was especially marked as regarded milk, or animal food of any kind. From an examination made at this time, I became satisfied she had enlargement of the heart. By inquiry, I ascertained she was passing a large amount of urine, and that this had been the case for some time. By measurement, the quantity was found to be seven pints in twenty-four hours. The urine was pale, and of lessened specific gravity. An examination for albumin, by heat and nitric acid, showed the very slightest cloudy appearance, of which I was uncertain, until comparison with another specimen, which had not been submitted to test.

A daily examination of the urine was made, and continued for a period of three weeks. At times, there was a slight increase in the quantity of albumin, while at others it entirely disappeared. At this time, another physician saw her in consultation, and was unable to satisfy himself, from our test of the urine, that it contained albumin, nor could I, except from my repeated examinations.

I now sent a sample of her urine to Dr. Walker, an accomplished microscopist of Franklinville, Cattaraugus county, who wrote me as follows :

DEAR DOCTOR—Yours of the 28th inst., also sample of urine, received. I have made repeated examinations of the sediment, and can find no casts of the uriniferous tubules present. I find the reaction acid, specific gravity 1,018, and no deposit of *albumin* with heat or nitric acid.

Should the symptoms which lead you to suspect kidney disease continue, another examination of the urine, after a few weeks, might reveal casts.

Very truly yours,

H. D. WALKER.

I had become convinced, by the steady appearance of albumin, although in such small quantity, and the constantly increasing anæmia, with other symptoms before stated, that my patient had granular kidney. At this time, she was so weak as to be compelled to keep the bed, only sitting up occasionally.

After she went to bed, the albumin almost entirely disappeared. It was at this time I sent the sample of urine to Dr. Walker. After a while she began to slowly gain strength, her appetite returned, and she was able to sit up, and soon to move about the house. Slight œdema of the ankles was now noticed, and I again discovered albumin in the urine. Her improvement continued, and after some weeks she was well enough to resume her usual occupations, the marked dirty pallor of the skin continuing, and albumin persisting in the urine. She now passed from my care and observation for several months. In about a year from the first appearance of the symptoms which led me to suspect the existence of granular kidney, I was again called to see her. She had, in the interval, been in fairly comfortable condition, but, whilst on a visit to Dunkirk, had become suddenly worse, and at this time there was an alarming increase of debility, with an entire loss of appetite, an occasional attack of vomiting, headache, and great disturbance of vision. She was very pale, and would stagger on walking across the room. She was still passing a large quantity of urine, which, on examination, was found to contain albumin in larger quantity than at any time before. There was considerable œdema of the ankles and some puffiness of the lower eyelids.

At this time I sent another sample of her urine to Dr. Walker, and he wrote me as to the result of his examination as follows :

DEAR DOCTOR—I have made an examination of the urine you sent me, with the following result : Reaction acid, specific gravity 1,010 ; by nitric acid and heat, a well-marked deposit of albumin ; by the microscope, a copious deposit of uric acid, and also plenty of well-marked granular casts were found, several of the latter being found in each drop of the sediment examined.

There can be no doubt about the case, from this examination. Would like to know her further history. Very truly yours,

H. D. WALKER.

The progress of her case after this was rapidly downward, and she died in about six weeks in uremic coma. During the whole course of her long sickness, her urine was above the normal amount in quantity, and at no time was there extensive dropsy.

I am convinced that it would have been impossible, until within a few weeks of her death, to have made a diagnosis of contracted kidney by either an examination of the urine for albumin, or by the microscope for casts.

Nevertheless, in establishing the fact as to the existence of this disease, it seems to me that repeated and careful tests of the urine for albumin stand first in importance. I have found, by the usual tests of heat and nitric acid, the urine of a patient may not appear different than normal urine, but by a comparison of that to which the tests have been applied, with the same urine without the tests, a slight opacity may be discovered in the former. A repetition of the examination next day may show a disappearance of the opacity, or an increase of the same. Following it up for a week, or, if necessary, for a month, never failing to make daily examinations, it becomes a very important factor in arriving at a diagnosis.

I have been so far impressed with the truth of this, that I make far more frequent examinations of my patients' urine than formerly, and find it important to make those examinations more carefully and more critically, but never expecting, in true granular kidney, that albumin will be found in any gross quantity.

The increased quantity of urine, persisting for some time, should always excite one's suspicions. The headache and marked dirty pallor are signs of importance; also the loss of appetite, and steadily increasing anæmia and muscular weakness.

There is undoubtedly a strong tendency to hemorrhage, and especially to cerebral hemorrhage. It is to be believed that this predisposition is shown in many cases by certain symptoms, such as vertigo, attacks of momentary unconsciousness, etc., which are surely to be taken into consideration in the diagnosis. A large percentage of all cases of granular kidney are accompanied, at

some stage of the affection, by enlargement of the heart. The fact that this condition exists without valvular lesion, is a valuable diagnostic sign.

I believe little assistance is to be expected from the use of the microscope. It seems to me we are likely to be led astray by placing much reliance upon it.

In other forms of Bright's disease, its aid is invaluable ; but here the diagnosis must rest upon a careful study and analysis of all the symptoms, with regular and frequent examinations of the urine for albumin, and, above all, a careful examination and study of the persistent condition of what may be known as indefinite illness, occurring in an individual over fifty years of age, where the patient is pale, the pallor of a dirty and slightly greenish hue, and he complains of some pain and inconvenience after eating ; often has slight headache and irregular muscular pains ; is easily tired out ; has sleepless nights ; his respiration somewhat hurried on exertion ; is subject to dizzy attacks ; is compelled to get up at night more often than formerly to void his urine, but, withal, still able to continue at his business, and is not easily convinced he is seriously sick. I believe this to be a fair picture of the early stage of many cases of the disease under consideration.

I am led to believe that contracted kidney is a comparatively common disease, and that it demands, at our hands, more careful study, looking to some means, not now at our command, whereby we may more certainly discover its existence at an early stage in its progress. If this paper shall, in the least, contribute to this end ; if it shall invite attention and thought, and, perhaps, investigations on the part of others far better fitted for the work than the writer, then it will have abundantly fulfilled its mission.

*NOTES ON THE TREATMENT OF ACUTE TONSILLITIS IN CHILDREN.**

By FRANK HAMILTON POTTER, M. D.

Lecturer on Laryngology, Medical Department, Niagara University.

When an inflammation attacks the tonsil, it is influenced in its progress by those constitutional states that so markedly affect the natural history of disease. Hence, it is important to recognize the presence of syphilis, tuberculosis, rheumatism, etc., in the constitution of any patient we may be treating for a tonsillitis.

In children, these diseases may be latent, but, none the less, they have a potent influence over the course of the malady under consideration. Therefore, we should always make ourselves familiar with the natural history of the parents, and, if any of these diseases are found, so modify our treatment as to meet and counteract whatever of baleful influence may have been transmitted to the child.

In the suggestions to follow, on the management of an acute tonsillitis in children, it must be understood that no routine practice is proposed. The plan detailed must be so modified as to meet the hereditary and acquired variations from health in the particular case under consideration.

In order to obtain a clear idea of what is required in a rational treatment of a tonsillitis, let us see how an inflammation may behave when attacking that organ. In our opinion, there has been too much refinement in this matter. Bearing in mind its anatomical structure, we observe, in the first place, that an inflammation may limit itself entirely to the tissue immediately surrounding the tonsil, and then we have the peritonsillitis of some authors; it may express itself in the superficial parts, and become the erythematous tonsillitis of others; it may be deep-seated, involving the parenchyma, and we have the parenchymatous tonsillitis, or the true quinsy of the older writers; and again, the brunt of the inflammation may be confined to the

* Read before the Buffalo Obstetrical Society, March 27, 1888.

lacunæ, and then the disease is called folliculous tonsillitis. Now, in our opinion, this is the same inflammation, modified according to the constitutional state of the patient, the kind and severity of the exposure, and so on. As an illustration, it has been observed that the variety of tonsillitis called parenchymatous, occurs with great frequency in rheumatic subjects, and treatment followed in recognition of this fact—as the exhibition of the salicylates, salol, etc.,—has resulted in prompt relief. Other instances could be cited in proof of this position, but it would carry us too far from the immediate purpose of this paper. The question before us is, how to treat a case of simple tonsillitis, by which is meant, one uncomplicated by any other disease, and uninfluenced by the presence of any diathesis. Such cases are not rare, and, in our opinion, can be greatly modified in their duration and severity by proper treatment.

We have to deal with a sthenic inflammation—one that develops very rapidly, and continues at a great height for some days. The plain indication, then, is to control the production of this heat, to so influence the nerve centers as to make a high temperature impossible. This is done by the exhibition of antipyretics. So much for the general treatment. The next indication is to relieve the local distress. When the mucous membrane of the mouth and throat is inflamed, the secretion therefrom is highly acid. This acid secretion acts, in time, as an irritant, and keeps up the local disturbance. The indication is to apply alkalies to the surface of the tonsil, to neutralize the acidity of the secretions, and relieve the inflamed surface of this great source of irritation.

This is the general plan proposed ; the details of its application are as follows :

The doses given are for adults, for the reason that we then have a definite standard to go by, which can be modified to meet the age of each individual case.

First, to keep down the temperature :

The various antipyretics may be used according to personal choice, but we have come to rely principally upon antifebrin.

This is to be given in five-grain doses every hour until the temperature falls to nearly normal, and then at intervals necessary to prevent it rising again. We have never been obliged to give more than three doses in order to accomplish the first indication; generally two doses have been sufficient. In children, the minimum dose according to age should be given, and the patient carefully watched. Occasionally, it will be found to have a depressant effect, and must be abandoned for one of the other antipyretics.

The local treatment can be applied in several ways. Bicarbonate of sodium can be dusted upon the tonsils by means of an ordinary powder-blower, or a solution, ten grains to the ounce of water, can be sprayed on the parts by means of an atomizer, or, where the patient is of sufficient age, he can be instructed to dip the finger into the powder and touch the surface of the tonsil with it, or he can hold the solution in the mouth, allowing it to bathe the parts for a few moments. This local treatment should be used frequently, say at intervals of an hour, during the day.

Our notes show that, with this plan of treatment, four cases of severe tonsillitis, seen within the last few months, were limited to two days each. On the third day, there remained simply the general malaise, which is apt to follow cases of this kind. The temperature of these cases, when first seen by the writer, ranged from 102° to 104° F.

Professional friends, to whom this treatment was suggested, have reported equally good results. It is not necessary to report these cases in detail, but we content ourselves by formulating the conclusions of this paper as follows:

I. When an inflammation attacks the tonsil, it is greatly influenced in its course by the presence of any diathesis.

II. The treatment must be so arranged as to meet and counteract the influence of this diathesis.

III. In all cases, simple as well as complicated, the general indications are to keep down the temperature and to relieve the local irritation.

IV. The first indication can be met by the exhibition of antifebrin in proper doses; the second by the frequent application of bicarbonate of sodium, either in powder or in solution, to the surface of the tonsil.

V. This plan, properly followed, will generally limit the disease from one to three days.

273 Franklin street.

*NOTE ON ERYTHROPHLÆIN—ANOTHER SUPPOSED
LOCAL ANÆSTHETIC.*

By ALVIN A. HUBBELL, M. D.,

Professor of Diseases of the Eye, Ear and Throat, Medical Department of Niagara University,
Buffalo, N. Y.

On January 11, 1888, Lewin communicated to the Berlin Medical Society his observations on local anæsthesia, induced by the application to the surface of mucous membranes and by subcutaneous injection of solution of erythrophlæin hydrochlorate, an alkaloid extracted from the bark of an African tree—erythrophlæum judiciale (erythrophlæum guineense).

This drug, he stated, when applied to the eye in solutions of the strength of one-twentieth to one-fourth of one per cent., produced anæsthesia of the cornea and conjunctiva "in from fifteen to twenty minutes, which lasts from one to two and a-half days." More concentrated solutions "cause a typical and very intense irritation, followed by dense opacities of the cornea." Used hypodermically, it produced profound anæsthesia in the parts which it reached.

Since this announcement was made, numerous observers have examined the properties of the drug. Some seem to corroborate Lewin's observations, while others do not.

Immediately after learning of Lewin's statements, I obtained a specimen of the erythrophlæin, and, in solutions of one-twentieth to one-tenth per cent., have experimented with it both on the eyes of animals and men. The results have been, uniformly, a peculiar and intense smarting pain, which continues for twenty to thirty minutes after instillation, causing conjunctal injection, lachrymation, and hyperæsthesia of the parts.

I have not been able to detect any anæsthesia at any stage of its action. The pupil remains unchanged, and the vision does not appear to be affected in any way.

The failure to obtain anæsthesia may be due to the drug which I have used not being genuine or of good quality; but I procured it from a reliable source, as I believe, and is said to be the same as that used by others who claim to get the anæsthetic effects. Future observations, and with other specimens of the drug, may yield different results. But erythrophlæin has not yet proved itself to me to be a local anæsthetic.

Society Reports.

TRANSACTIONS OF THE BUFFALO OBSTETRICAL SOCIETY.

(Stated Meeting, March 27, 1888.)

The President, DR. R. L. BANTA, in the chair.

DR. FRANK H. POTTER read a paper, entitled "Notes on the Treatment of Tonsillitis in Children." [See page 455, this issue of the JOURNAL.]

DISCUSSION.

DR. STOCKTON said that his views of the constitutional treatment did not differ from those expressed in the paper; that diatheses, especially the rheumatic and gouty, should be borne in mind by the therapist; but that he was, however, unacquainted with the local treatment advocated by the essayist, and, consequently, could not speak in intelligent criticism thereof. He observed that the paper did not treat of or consider one distinct form of tonsillitis that had given him more trouble than any other, viz.: the asthenic or anæmic variety that occurs generally in delicate females, who have enfeebled circulations and were otherwise poorly nourished; these were, in his view, even more troublesome to manage than those cases depending upon the rheumatic or gouty diathesis. Guaiacum and biniodide of mercury had proved valuable remedies in his hands for such cases.

He, furthermore, regarded the disease as essentially different, when it invaded the deep structures of the gland, from that which only involved its lacunæ, i. e., whether it was a parenchymatous inflammation or a peritonsillitis, these being two distinct forms of the disease, pathologically speaking, as well as clinically.

The suppurative form of the malady was to be treated surgically; in the erythematous and follicular varieties, he gave one-fiftieth grain of the biniodide of mercury to the adult, proportionately to children, and had employed *phytolacca decandra*—dose, two to three drops frequently repeated—with benefit, though he confessed to the use of the latter remedy somewhat empirically.

Finally, he spoke of the value of hot water, either as a gargle or applied to the tonsils through the medium of pledgets of cotton, and, in a concluding compliment to the essayist, hoped he would meet with his usual good fortune in having his paper translated into four tongues, and read by the nations of the earth.

DR. HARTWIG had not expected much from the use of bicarb. of soda, and, therefore, had not employed it; but, from the statements of its efficacy by the reader, he should be induced to make a trial of it. He upheld the pathological views of the paper, but had grave doubts as to the cure of parenchymatous inflammation in two days by any method; certainly, such cases would go on to suppuration, no matter what was done. Inquiring what was thought of chipping off pieces of the tonsil during the progress of the disease, he proceeded to relate cases that he had seen cut short on the third day by the employment of this measure, but admitted that it was not usual to meet with purulent tonsillitis in a child under ten years.

DR. CAMPBELL confessed it was new to him that the secretions in these cases were acid, and inquired, "Is this an established fact? If so, what is the nature of the acid?" He regarded the exhibition of antifebrin as good treatment, stating that it was a more powerful nervous sedative than aconite; but believed some cases would recover in two or three days, in spite of any and all treatment, while it was equally true that others would run as many weeks, no matter what plan was pursued. He referred to the employment of the chloride of ammonia and *phytolacca decandra*, the latter used chiefly in the south, and the ammoniated tincture of *guaiaic*, all useful remedies in this disease.

DR. BRIGGS regarded the different types of the disease described by the members, and which were apparently so confusing, as explained, either by the different stages in which the cases were seen, or to the different forms that inflammatory action was well known to assume in different individuals. In a form of acute tonsillitis, ushered in with a chill and the other phenomena attendant thereupon, the treatment he had employed of late was morphia (grain, one-twentieth), and Fleming's tincture of aconite (one drop), administered every hour or two (adult dose—this proportion to children, according to age), and he had yet to see a case, taken early, where, under this plan, the inflammation had not subsided in from twelve to twenty hours, the patients sleeping quietly most of the time; whereas, under all other methods he had employed, they were restless, fretful and perturbed in spirit. As to local applications, he had no confidence in any excepting hot water, which he allowed if the patients were old enough to gargle.

In a chronic form of the disease, frequently encountered—he had seen two such cases that day—where the tonsils filled the whole faucial cavity, and yet, nevertheless, where the patients were about the house, could swallow moderately well, and speak, without muffled voice, with little or no apparent constitutional disturbance. What, he asked, was to be done in such cases? They were, to his mind, most difficult cases to manage. He had seen scarification recommended and even practiced, but was yet in doubt as to its usefulness. He had no experience with the alkaline method proposed by the essayist in the acute tonsillitis of children; but in anæmic cases, and many of the recurrent types were so, he approved of the general after-treatment recommended.

DR. VAN PEYMA'S attention had been called by the essayist to this method of treatment some time ago, and he had tried it in a few cases. One adult, the wife of a butcher, said she "liked the powders," and did well under them; another case, a child, recovered promptly; but a third case did not do as well, though this was not a typical case, as the disease, though involving the tonsil, was not limited to it. He was always much interested in any discussion involving the various kinds of inflammation, and had tried, in his studies, to define the boundaries of the inflammatory processes; but had finally come to the conclusion that, very

much like the history of snakes in Ireland, there were no boundaries, and this fact, he thought, was not emphasized as it should be.

He believed the various kinds of inflammation described in general were more the differences of degree, and of the varying histological characters of the tissues involved, than of real differences of the disease itself. In regard to the employment of *phytolacca decandra* in tonsillitis, he desired to call the attention of the society to the somewhat analogous use of the drug, recommended in a paper on diseases of the puerperal breast he had presented here some two years ago.

DR. THORNTON commented upon the paper as being short and to the point, though it omitted to treat of cases we so often met, where the inflammation had already gone on to suppuration when first seen by the physician. He had been in the habit of using the chlorate of potash and iron combination in follicular tonsillitis, and had also employed aconite with satisfaction, but would now use antifebrin instead of the latter, as recommended by the essayist. He was somewhat at a loss to account for the fact that an acid mixture and the alkaline treatment should both apparently relieve this disease with tolerable certainty.

DR. HOWELL referred to the point made by Dr. Campbell, as to the chemical composition of the acid found in the secretions, and inquired: "Are these secretions markedly acid in all cases?" He confessed some surprise at the efficacy of the bicarb. soda, which appears, according to the essayist, to have aborted the attacks. His own custom had been to give aconite in the early stages of the disease, and to also employ an antiseptic and deodorant gargle, by which plan he aimed to reduce pyrexia, remove offensive secretions, and destroy germs. In the later stages, he has employed tincture of belladonna in one-drop doses every two hours with success. His experience with *guaicum* was limited to a single case, and as the employment of this drug caused the patient to seek advice at other hands, he had never had the courage to prescribe it again.

Certain subjects, as well known, were prone to recurrent attacks, and, as an apparent consequence, had habitually enlarged tonsils. Whether the fibrosis in such cases contributed to the subsequent attacks by impairing the circulation, or whether these

were due to diatheses or dyscrasias, he could not say; but of one thing he was very sure, that resection of the tonsils was good treatment in such conditions; and another point that had become settled in his mind was, that exsection was even proper in their acute stages. Hemorrhage need not be feared as a consequence of the operation, as it could be readily controlled by diluted vinegar.

DR. POTTER, in closing the discussion, said the remarks to-night had reminded him of the literature of the subject; almost every author had his favorite method of treatment which he believed better than all others. He thought this diversity of opinion due to the fact that the various degrees of inflammation of the tonsil had been classified and described as so many distinct diseases; his own belief being that after an inflammation was started in that organ, its expression was determined by the kind of soil upon which it grew. Dr. Van Peyma had made a most wise observation when he said the limits of an inflammation could not be sharply defined. It was the non-recognition of this fact that made opinions so diverse and treatment so involved. The indications were simply to treat the diathesis, where such a constitutional condition was recognized, to allay the fever, and to relieve the local distress. The shortest way to this end was the most rational treatment. The degree of the disturbance determined the necessity for the more or less energetic application of the method adopted. The various suggestions made by the members were often of benefit, but they were adapted to special conditions, and failed to recognize the unity of the inflammations of the tonsil. The method proposed in the paper was simple and effective, and particularly adapted to children, which, he begged the society to remember, was his chief purpose in bringing the subject before it.

In regard to the reaction of the secretions of the mouth during these attacks, he would say that, in his cases, they were acid. This was not remarkable, for the acid secretion occurs sometimes in health, as after severe exercise, etc., and it was known that the secretions from the nose in acute rhinitis were acid.

Miscellany.

INUNDATION OF THE LUNG.—An Italian surgeon, A. Riva, now proposes to cure tuberculosis by injecting antiseptic fluids into the pleural cavity, thus completely flooding the diseased lung. With a modified Mohr's tube and aspirating needle, an ounce of the antiseptic fluid selected is passed into the pleural sac. The injection should be made through the anterior part of the second intercostal space. Riva claims that there is little risk attending the operation, but mentions the following dangers:

1. Wound of a blood vessel and injection of the liquid in same.
 2. Puncture and injection of bronchus or the pulmonary alveoli.
 3. The toxic action from absorption of the antiseptic employed.—*Revista Medico-Quirurgica*.
-

DEATH OF DR. C. R. AGNEW.—Dr. C. R. Agnew, the eminent ophthalmologist, died of acute peritonitis and typhlitis on the 18th inst.

Dr. Agnew was born in New York in 1830, and in 1852 graduated from the College of Physicians and Surgeons. For many years he was engaged in general practice. During the war he was very active in organizing the U. S. Sanitary Commission, and for three years a large portion of his time and talents were devoted to this benevolent work.

The Department of Ophthalmology and Otology in the College of Physicians and Surgeons, and the Manhattan Eye and Ear Hospital may be said to owe their foundation to his wise forethought, and it is largely due to his influence that ophthalmology has become the most highly developed of the surgical specialties in America.

"THE LANGUAGE OF MEDICINE," by Dr. F. R. Campbell, has just been published, and may now be obtained of all booksellers. While the work was primarily designed for the instruction of medical students, we believe that every medical man who cares

to use and pronounce correctly the technical terms of his profession, will find the book well worthy of his attention. That some such work as this, calling attention to the rules of English orthoepy, is needed, will be admitted by every practitioner. At a recent meeting of a gynecological society, for example, the word *gynecology* was pronounced in four different ways, when the rules of pronunciation admit of but one.

A "CONGRESS for the study of tuberculosis in man and the lower animals" will meet in Paris June 25 to 31, 1888. The committee in charge consist of Chauveau, president; Villemin, vice-president; and Batu, Le Blanc, Nocart, Rossignol, Cornil, Grancher, Lonnelogue and Verneuil, members of the committee.

"YOUR wife is in a very critical condition, and I think some specialist should be called in for consultation upon the case."

"There, now, doctor, I was right again. I told my wife long ago she ought to have proper medical treatment, but she thought you might be offended."—*Boston Journal of Health*.

SOME French physicians, Carrier, Rotellon and Baudin, claim that in the early stages of general paralysis, glycosuria is frequently present. Legrand du Saul insisted that it was very difficult to distinguish the early stages of general paresis from the nervous symptoms accompanying some forms of diabetes.

DR. B. has recently lost his beloved wife. "Doctor," said I, "you have my heartfelt sympathy; you must suffer grievously."

"Yes, but I took antipyrin according to the method Germain See recommends for hypochondriasis, and my grief was instantly relieved."—*Le Journal de Med. de Paris*.

LAWYER (in a hoarse whisper)—"Doctor, I've got such a cold this morning that I can't speak the truth." Doctor (sympathetically)—"I'm glad it isn't anything to interfere with your business."—*Boston Herald*.

CITIZEN—"In case of a sudden illness, doctor, what ought a person to do while waiting for a physician?"

Doctor—"Well, a physician's time is very valuable, you know, and the patient ought to get the two dollars ready, so that the doctor won't be bothered with making change."—*Scribner's*.

A WRITER in the *New England Medical Gazette* divides the medical world into homœopathists and allœopathists. We have, for a hundred years, been known as allopathists by the Hahne-mannians, and do not understand the reasons for this change in spelling.

"PROFESSOR, what are your views concerning the schools of medicine and theology?"

Professor—"That depends upon circumstances. When I am slightly ill, I am a homœopathist and a Unitarian; but when I am very sick, I am an allopath and a Calvinist."

A LAW DISPENSARY has been established in New York, under the auspices of the People's Mission, for the benefit of the poor who require legal advice and cannot afford to pay for it.

MRS. DE BUFFINGTON says her husband suffered from suffusion into the plural, but the doctors drew off the water with an exasperator, and now he is incandescent.—*Weekly Medical Review*.

Hippolyte Brochin, for the past thirty-five years editor of *La Gazette des Hopitaux*, died in Paris, April 1st, aged eighty years.

Selections.

SYPHILIS OF THE ENDOMETRIUM.

Dr. T. A. Ashby, in a paper published in *The Obstetric Gazette*, says: Secondary syphilis is almost sure to manifest itself in the syphilitic woman when the disease is contracted prior to conception or during the act of conception. Ohlshausen mentions that among 657 syphilitic women, 231 miscarried, while 426

were delivered, at term, of living and dead children. Parvin states that at Lourcine 260 aborted out of 416 pregnant syphilitic women.

Abortions induced through syphilitic influence may be brought about either through maternal or fetal infection. A woman previously inoculated with syphilis will abort more readily than one who contracts the disease during pregnancy, and the danger of abortion seems to be in ratio to the period of infection. Thus contagion communicated at the time of fecundation is more likely to lead to a separation than where the poison has been introduced after the fourth month. Syphilis may be communicated through the father to the fetus, which may or may not result in its death and separation, and the mother may escape infection. On the other hand, the mothers have become infected through the fetus. A woman may have secondary syphilis and pass through the entire term of pregnancy without any manifestation of the disease in connection with the reproductive organs, but this condition of exemption may be regarded as an exception to the general rule that syphilitic women are almost sure to abort.

When pregnancy becomes established in the syphilitic subject, it invites a manifestation of the disease at the point of contact of the fetal and maternal tissues. The decidua becomes involved in a condition known as *syphiloma of the decidua*, and the placenta is so modified in its structure and mode of development as to constitute a condition recognized as placental syphilis. The extent of these changes which take place in the decidua and placenta, indicate the result of the syphilitic involvement. Separation may or may not occur, according to the extent and influence of the poison upon the maternal and fetal tissues. The placenta may be affected throughout its entire thickness, or only either the maternal or the fetal portion. When the infection occurs through the mother, the maternal portion is that which is chiefly involved, and *vice versa* when the disease approaches through the the fetus.

The local manifestation of the syphilitic virus in the decidua, as a general rule, to which I know of only two exceptions, ceases as soon as separation takes place, whether by miscarriage or labor at full term. The degenerative changes which follow the

termination of gestation seem sufficient to remove the involved endometrium. This process must almost invariably take place. I have been unable to find any references in the literature of this subject to a continuation of the syphilitic manifestation upon the endometrium after labor or miscarriage. If observers have noted this condition, they have been singularly remiss in calling attention to it. That a condition of continued involvement of the mucous membrane at the placental site does occur, my experience with two cases herein related fully confirms.

The condition observed is one of continued proliferation of epithelial tissue—a highly luxuriant granulation, if I may so term it—which returns again and again after removal, resembling, in this respect, the proliferative exfoliations of an epithelial cancer. The sole origin of this condition I have referred to secondary manifestations of syphilis in the endometrium at the placental site or in this neighborhood. The disease under consideration has followed, in the two cases under my own observation, a miscarriage which was referred to the influence of the syphilitic poison. In Case II., there was a return of the endometrial trouble, after an interval of three years from date of former treatment, which could have no reference to any other causative influence. In my opinion, syphilis was the entire cause of an inflammatory condition of the endometrium, which was followed by hyperplasia of the elements of the decidua, a condition which has been described by De Sinèty as a fibroid degeneration of the villi of maternal syphilitic origin. Why the latent influence of the syphilitic virus should have manifested itself in endometrial involvement, I am unable to explain, any more than the various other singular anomalies of this disease which do not seem susceptible of rational solution. We can the more readily understand the primary outbreak of secondary syphilis in the decidua and placenta during gestation, and the continuation of the syphilitic influence upon the endometrium after miscarriage, since here we have the possible retention of placental tissue as a probable nidus for the subsequent outgrowth of granulations. In this instance, the influence of the poison is simply continued until overcome by local and constitutional treatment.

The subsequent development of syphilitic lesions upon the endometrium I can only account for upon the general assumption

of a local dyscrasia in connection with the lining membrane of the uterus inviting a concentration of the specific influence upon this membrane, which resulted in hypertrophy of the glandular elements and a degenerative change in the epithelial lining of the uterine cavity.

HABITUAL CONSTIPATION.—W. J. Maddox, M. D., Washington, D. C., says: In regard to results produced from the use of Acid Mannate, I will give two cases: Case 1, Mrs. N. C., applied to me for treatment for habitual constipation. After trying several remedies without any good effect, I put her on the Acid Mannate treatment. Since taking it, she has had marked improvement, and at this date is not troubled with constipation. Case 2, Mrs. F., pregnant, was troubled with constipation. I gave the Acid Mannate, and find that it acted like a charm with her. She, at the present time, is not constipated. Both of the above patients told me that the Acid Mannate operated very mildly. It is the remedy for constipation, either habitual or caused from pregnancy. I shall continue to use it, being very much pleased with its action.

THE ACTION OF STROPHANTHUS.—Fraenkel sums up his views as follows:

1. Twelve cases of valvular trouble, mostly mitral stenosis and insufficiency, and aortic stenosis. Three cases were complicated by considerable dilatation of the left ventricle, chronic nephritis, interstitial hepatitis and pleuritis dextra. Seven of these did not react to the drug; in four, there was a brilliant success; in one, a moderate one. The maximum dose was twenty to thirty drops in the day. In the improved cases, dyspnœa, œdema, etc., lessened, but the remedy refused to act after some days, because the system had gotten used to it. In the negative cases, digitalis acted excellently four times; moderately well once, and not at all in two.
2. Three cases of arterio-sclerosis, with dilatation and hypertrophy of the left ventricle. Here strophanthus was without effect, while in two of these cases digitalis was of real service. The cardiac asthma was not at all influenced, which is not in accord with Zerner and Löw's nor with Frazer's views.

3. Three cases of functional disorder of the heart—weakened heart. Two from alcohol, one from tobacco. In these cases, with irregular pulse, dropsical effusions and dyspnœa, it acted extraordinarily favorably. One patient received, up to the time of his discharge as cured, in seventeen days, 16.5 grams; another, in twenty-two days, twenty-one grams of the tincture.

4. In chronic nephritis, the results were negative.

5. A case of portal engorgement, with cirrhosis of the liver. The result was a brilliant success, the ascites disappearing.

Fraenkel concludes :

1. *Strophanthus* exercises a distinctly tonic action on the heart—in proper doses, it may stimulate; it increases blood pressure, increases diuresis, and removes œdema.

2. It acts moderately in valvular affections, kidney troubles, increased arterial pressure, and favorably in functional heart troubles, and possibly in portal congestion.—*Munch Med. Woch.*, No. 3, 1888.

ANTIPYRIN IN THE TREATMENT OF SEMINAL EMISSIONS.—The older remedies for this affection, camphor and lupulin, have very properly been abandoned. Kurschmann says that the sedative action of lupulin on the genital organs is far from demonstrated, and the employment of camphor is not more reliable, although Zeissl, Purjesz and others consider it the best remedy in this affection. *Nux vomica*, arsenic and atropine have also been recommended, while Diday prefers the bromides of potassium and sodium to all other remedies. He recommends from thirty to eighty grains of the bromide of potassium to be taken on retiring. But these large doses of bromide will produce acne, and are also liable to induce mental enfeeblement. In order to avoid the dangers of bromides, Thor, of Bucharest, has been experimenting with antipyrin in the treatment of these affections. He advises the patient to take from seven to fifteen grains of the drug on retiring. In seventeen cases, he has completely cured the complaint, without any unpleasant consequences. According to Beart, antipyrin is useful in neurasthenia of the sexual organs, but in these cases from 1 to two grains a day should be given.—*Revista de Cincias Medicas*.

REFLEX NEUROSES DUE TO CONSTIPATION.—Besides various circulatory disorders, such as palpitation, irregular pulse and vertigo, which may be attributed to excitation of the cardiac branches of the great sympathetic, Kish maintains that many obstinate cases of migraine are due to constipation. Some forms of abdominal neuralgia, lumbo-sacral pains, sciatica ovarian pains and neuralgia of the fifth pair are often due to habitual constipation. Kish has collected forty-eight cases of neuralgia cured by relieving constipation.—*Journal des Sciences Med.*

Editorial.

THE AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS.

A new national organization of specialists, who have adopted the above name for their association, was perfected in this city on the 19th of April, ultimo. It appears that a number of physicians in different portions of the country, interested in abdominal surgery, obstetrics and gynecology, have been in consultation and correspondence for a number of months past, in regard to the feasibility and propriety of organizing such a society. Sufficient encouragement was developed thereby to warrant the issuance of a circular-letter to a limited number of medical men, asking their co-operation and active support in the plan proposed. This elicited some forty favorable responses, about one-half of whom were present at the initial meeting on the day mentioned, when the organization was perfected as stated.

At this meeting, a constitution and by-laws were adopted, officers were elected, and a comprehensive working method agreed upon, looking to the future welfare, efficiency and permanency of the association. The following is the list of officers chosen:

President, William H. Taylor, Cincinnati; vice-presidents, E. E. Montgomery, Philadelphia; J. H. Carstens, Detroit; secretary, William Warren Potter, Buffalo; treasurer, X. O. Werder, Pittsburgh; executive council, Thomas Opie, Baltimore; James

H. Etheridge, Chicago; C. Cushing, San Francisco; Melancton Storrs, Hartford; Byron Stanton, Cincinnati; delegate to the Congress of American Physicians and Surgeons, James P. Boyd, Albany; alternate, Hampton E. Hill, Saco, Me.

The first annual meeting of the association was appointed to be held in Washington, September 18, 19 and 20, 1888, coincident with the meeting of the Congress of American Physicians and Surgeons, which will then and there also hold its first session.

If names speak for the success of a movement like this, or invite confidence by their weight, then we would venture the opinion that the association has been fortunate in the selection of the men who are to guide its affairs at the outset. We bespeak for this new candidate for admission to the congress a cordial welcome, and predict for it a successful career in the important fields which are its province to cultivate.

We notice, in the list of founders, the names of Drs. Thomas Lothrop, R. L. Banta and W. W. Potter, of Buffalo, all men of acknowledged excellence and professional standing, who require no encomiums from us.

Finally, we would especially congratulate the association upon its choice of Buffalo as the place of holding its inaugural meeting. It ought to be the pride of every citizen that such bodies come here for deliberation, and there should be no lack of encouragement nor faint praise to the enterprise that promotes the interests of our city, by inviting scientific or other organizations to hold their meetings within its borders.

NIAGARA UNIVERSITY.

CONVOCAION FOR CONFERRING DEGREES IN MEDICINE.

The annual convocation of Niagara University for conferring degrees, in connection with the work of its Medical Faculty, located in Buffalo, was held in the Association Hall on the evening of the 10th of April. The large number of ladies and gentlemen present evinced the great interest which is being taken by the citizens of Buffalo in the progress of a higher medical education. As many were unable to get admittance, it is to be hoped that another year the authorities of the University will hold convocation in a larger hall.

The absence in Europe of the Right Reverend Chancellor, the Bishop of Buffalo, was greatly deplored; in his place, the Vice-Chancellor, Rev. P. V. Kavanagh, presided; and, having declared convocation open, made an address, in which he briefly referred to the successful work being done by the several faculties of divinity, arts, medicine and law. At the close of his remarks, the successful candidates for the degree, clad in their academic gowns, were presented to the Vice-Chancellor by Dr. S. T. Clark, and, following the beautiful and impressive ritual employed by this University, they severally received the hood of the Doctor in Medicine, and subscribed to the following declaration in the University book:

"We, the graduates of the Medical Department of Niagara University, promise to cherish in our calling a feeling of deepest responsibility, recognizing therein the necessity for the continued study and cultivation of the science and art of medicine and surgery in sincerity and truth, by which shall be shown forth in our lives the duties and moral obligations devolving upon us, as members of a noble profession, and as scholars of a school whose teachings shall ever be our guide to that onward course in her motto—'*Religio, Mores, Cultura.*'"

The names of the gentlemen who have thus worthily won admittance into the profession, are as follows:

Henry Clark Buswell, Buffalo, N. Y.; John Joseph Twohey, Buffalo, N. Y.; Howard Lincoln Hunt, Hamburg, N. Y.; John Francis Mulherin, Syracuse, N. Y.; Edward Nicholas Pfohl, Buffalo, N. Y.; Westervelt Banta, Buffalo, N. Y.; John Joseph Finerty, Honesdale, Pa.; George Hervey McMichael, Brantford, Ont.; Eugene Edward Martin, Buffalo, N. Y.; Clarence Butrick Le Van, Middleport, N. Y.; Sydney Algernon Dunham, Warren Center, Pa.; Anthony Schoonhart, Buffalo, N. Y.

The address to the graduates was delivered by Dr. Henry Flood, of Elmira. It appears in full in the pages of the JOURNAL, and we commend it to the perusal of all our readers. We regret that we cannot also publish in full the admirable address of Rev. James T. Edwards, A. M., D. D., president of Chamberlain Institute at Randolph. He spoke for nearly an hour, greatly delighting his hearers with his charming eloquence and his effective presentation and illustration of his subject.

He began by saying that in his own mind the prototype of the doctor was he who bravely takes his life-boat and goes out upon the tempestuous sea to rescue shipwrecked lives. He

vividly compared the earnestness, zeal and self-sacrifice of the physician with those of the life-saver. At times the physician stands forth in the view of the whole world. Every nation has anxiously watched the course of Dr. Mackenzie, the medical attendant of the Crown Prince, knowing full well that the fate of empires hangs upon his skill. The whole American nation was in sympathy with those doctors in New York who had attacked the enemy which had broken into the citadel of the mind of Roscoe Conkling. The doctor's work is a high trust. He is admitted into the very penetralia of the family, and becomes the repository of their well-guarded secrets. He should have a nice sense of honor. The world has never ceased to feel a deep contempt for the doctor who removed the drapery from the lifeless form of Lord Byron, and, discovering his club foot, proclaimed to the public the existence of a deformity which its possessor had so carefully concealed. Courtesy and sympathy are qualities which make the physician the more popular, even if they add nothing to his skill. It is well to cultivate that sympathy which ceases to be an emotion, but becomes a motive. The young doctor should avoid jumping at conclusions, and should not fall into the errors of phrenology, faith or mind cure and materialism. The address most happily set forth the duties and responsibilities of the medical man. The above sentiments indicate only the drift of the speaker's thought, but no extracts can do justice to the eloquent address.

At the close of convocation, the Faculty and invited guests assembled at "The Genesee," where over 100 sat down to enjoy the good cheer furnished at the alumni banquet. The menu was worthy the reputation of "The Genesee." The first toast of the evening was in honor of Dr. John Cronyn, president of the Faculty, whose absence through serious sickness would have cast a gloom over the assemblage were it not for the joyful knowledge that he was safely convalescent.

We have not space to note the many admirable responses to the various succeeding toasts. Pre-eminent among all, however, was the response of Prof. F. R. Campbell to the toast of the Medical Department of the University. This, written in heroic verse, sparkled with wit, humor and satire, and the successive "hits" at the special pursuits, peculiarities and vagaries of individual professors, caused much laughter and amusement.

*ANNUAL MEETING OF THE ALUMNI ASSOCIATION,
MEDICAL DEPARTMENT OF NIAGARA
UNIVERSITY.*

Convocation day brought together many of the sons of "Niagara," and no little interest was taken in the proceedings of the association by the medical men of the city. The morning meeting was devoted to business matters and the election of officers, which resulted as follows: President, Dr. C. C. Frederick; first vice-president, Dr. E. J. Murphy; second vice-president, Dr. L. J. Hanley; secretary, Dr. C. G. Congdon; treasurer, Dr. H. D. Ingraham; executive committee, Drs. George W. T. Lewis, F. R. Campbell and F. H. Potter.

The address of welcome, on the part of the faculty, was made by Prof. Thomas Lothrop. He said:

GENTLEMEN—On this auspicious occasion, which calls together annually, from widely distant sections, the alumni and friends of the medical department of Niagara University, the faculty bids me welcome her sons.

Every movement which enters, as a factor, into the solution of the great problem of human progress, must be inspired by certain important fundamental principles. The medical profession have felt the influence of public sentiment for higher medical education. This sentiment has been fully recognized here as elsewhere. Medicine, as a profession, has too often been degraded to the position of a trade, offering to scheming adventurers and mercenary charlatans a fertile field for the exercise of their impious gifts. Medical schools, conducted on business principles, with a view to contribute money to covetous professors rather than to benefit the human race through the advancement of knowledge, have been willing instruments in this work of debasement. The recognition of these facts, so fully appreciated by the better element in the profession, led to the establishment of this medical school. The trustees of the university selected men to carry into effect their object, in sympathy with this higher sentiment of the profession and the public. The movement, thus inaugurated, has brought with it a certain responsibility, which is felt by the medical faculty of the university, and must be shared by the alumni, upon whom we depend for encouragement and material support. It matters not how meritorious may be our motives or how high our aims, associated effort, inspired by strong convictions of duty and of right, and encouraged by a common sympathy and a common purpose, is absolutely necessary for the maintenance and advancement of so great a movement. These facts demonstrate forcibly the necessity of such an organization as the Associated Alumni to give moral support to the faculty in their responsible labors.

Fully realizing the magnitude of the work before them, the trustees incorporated into the organic law of the university a compulsory three years' course of instruction, which is possessed by no other medical college in this state, and also the divorcement of the teaching and the licensing powers, so that every candidate for the degree of doctor of medicine, must submit his professional attainments to a critical examination before the board of examiners, composed of distinguished members of the profession, and called to their work independently of the teaching power. A further restriction

is also made, by requiring a certain standard of intellectual attainments of all students who apply for admission into the school. These features, incorporated into the charter of the University, have been advocated by the best minds in the profession. In five years, receiving a generous support from the parent university, and encouraged by a strong sentiment in the profession in favor of a higher medical education, the medical faculty have established a school of medicine upon the fundamental principles above enunciated, have presented, in this period, two classes for the degree of Doctor of Medicine, of splendidly equipped men, and to-day send before the board of examiners twelve men, good and true, who have successfully stood the test of a written examination, occupying an entire week, which, in the wide range of subjects and severity, cannot be exceeded by an institution in this country.

Speaking in behalf of my colleagues, we depend upon the alumni for support in this important work. We do not ask your sympathy and aid for our personal and professional aggrandizement. We have at heart the important work, undertaken by the university, of thoroughly educating medical men *pro bono publico*.

Medicine, however, is a progressive science. It needs earnest workers and zealous students. Original research and investigation can be prosecuted here in our laboratories, as well as elsewhere. Original thinkers and indefatigable laborers are not wanting in this new country, so absorbed in mercenary pursuits. We instance the important introduction to the profession, of "forced respiration," by George E. Fell, of our faculty, in opium narcosis and asphyxia, as an earnest of what every member of our faculty endeavors to do for the profession and the public. We need material aid to support men in their investigations of disease. Among our money princes in this wealthy city, is there not one who will endow a professorship or found a laboratory in this college, which will enable us to prosecute scientific work, original investigation into the unknown of disease, which will bless in its results the human race?

Almost single-handed and alone, and antagonized by an unscrupulous opposition, we have accomplished more than our most sanguine anticipations. In the future, aided by the efforts of the alumni and encouraged by the better element in the profession, and materially assisted by the wealth and intelligence of our city, we hope to become, at a day not far distant and in a fuller measure than at present, a beacon light which will send its beneficent rays far and wide over our beloved country and over the world, to alleviate human suffering and to bless mankind.

The afternoon session was devoted entirely to the reading and discussion of papers, and we are glad to be able to announce that in subsequent numbers of the JOURNAL we will present to our readers the very admirable papers which were, at this meeting, read before the association.

THE BUFFALO OBSTETRICAL SOCIETY.

This society, organized only a few years ago, has accomplished excellent work, and the reports of its proceedings have been read with great interest. Upon the occasion of the meeting of distinguished obstetricians and gynecologists for the organization of a national association, the society demonstrated

that, when "on hospitable thoughts intent," it could make a reputation on other than purely scientific lines. It having come to the knowledge of the members of the society that such a gathering of eminent men was about to convene in this city, it was determined to give them a fraternal greeting, and Prof. Thomas Lothrop was asked to express the welcome of the local society, which he did in the following words:

GENTLEMEN: On this auspicious occasion, which calls together from widely distant sections of our common country, representative men with a view to advance the interests of a great profession, I am bidden by my confreres of the Buffalo Obstetrical Society, and by members of the profession in our city, to tender you a cordial welcome.

It is a notable feature of our day that, in the various departments of human knowledge, associated effort in special lines of thought and study is adopted to assist the labors of scientific men. The organization of societies to promote the interests of other departments of medical science, by enlisting the energy and ability of men of like professional tastes and habits, have contributed in a great measure to the activity observed in professional circles on medical and surgical subjects. In the department of obstetrics and its allied science, gynecology, there is a wide field of labor, and of the most absorbing interest. If wisely directed, your efforts in organizing an association for the advancement of these special departments of medical science will bring forth results to bless humanity and the noble profession to which we belong. We rejoice at these evidences of interest and activity which have summoned you from your busy work, and for the good of the profession and humanity, to take sweet counsel together for the perfecting of your scientific labors.

Let not, however, your earnestness in organization, nor your zeal in this special department of medicine, hinder you from taking even a cursory view of our beautiful city, which, with its parks and boulevards, its educational and eleemosynary institutions, place it in a commanding position in the Empire State. While yet young in years, compared with the great centers of population of the East, Buffalo maintains a proud position by its increase in wealth and population, and in the advantages it offers for commerce and enterprise, inferior to none of her sister cities. The medical profession, for which I speak, has worthily maintained her reputation, and promoted, by honorable labor, her interests.

I beg to express the wish that your deliberations here will be fruitful of good in the special work which calls you from your distant homes; that your tarry in our city may be among the pleasant incidents in your busy and useful lives; that your stay may be prolonged to enjoy the hospitality it is our privilege to tender you, and that we may improve the opportunity to become personally acquainted with our honored guests and also to be known better of them.

The limited time which the organizers of the Association had allowed themselves for a stay in Buffalo, made any formal gathering of the profession impossible, but it was determined that the society should at least meet their friends from abroad; consequently, during the midday intermission in their labors, a luncheon was spread at "The Niagara," and the members of the association

and the Buffalo Obstetrical Society, together with a few invited guests from the city, sat down to a table which, with its decorations of flowers, fruit, the accompanying sweet music and the perfection of the menu offered, left nothing to be desired, at least in the estimation of the writer, who had the honor to be one of the invited guests. The absence of formality, necessary from the limited time at disposal, was rather a charm than otherwise, and the luncheon very happily ended with a short, off-hand speech from Prof. Thomas Opie, M. D., of Baltimore, in which he very humorously and eloquently returned the thanks of the association for the kind welcome and fraternal greeting received at the hands of the members of the Buffalo Obstetrical Society.

AN extract from a lecture of Dr. William Murrell, of London, is printed in our advertising pages. He calls attention to the necessity of clearly indicating the variety of Pepsin when prescribing this important agent. Our own experience has led us to about the same conclusion as to the value of relative brands. *Fairchild's Pepsin* has never failed to give us satisfactory results. We have found it better than English, French, German or other pepsins. When a combination of the digestive agents is indicated, we use *Lactopeptin* with uniformly good effect.

Book Reviews.

A Practical Treatise on the Medical and Surgical Uses of Electricity, including Localized and General Faradization, Localized and Central Faradization, Franklinization, Electrolysis and Galvano-Cautery. By GEO. M. BEARD, A. M., M. D., and A. D. ROCKWELL, A. M., M. D. Sixth edition; revised by A. D. ROCKWELL, M. D., with nearly 200 illustrations. New York: Wm. Wood & Co., 56 and 58 Lafayette place. 1888. Matteson, Buffalo.

Since 1871, this work has stood pre-eminent in its particular field, and the progress of our knowledge has been recorded in the pages of its successive editions.

While electricity is far from being a panacea, yet its increasing range of usefulness in medicine may be best illustrated by reference to these various additions. In the second edition, the chapters on Electro-Physics and Physiology were largely rewritten; the method of central galvanization described and illustrated, electro-surgery more fully treated, and the relation of

electricity to the diseases of children and of the skin, considered in detail. In the third edition were given the highly-satisfactory results following the treatment of exophthalmic goitre by galvanization of the sympathetic, and of some of the sequelæ of acute diseases by general faradization. The chapter on Electro-Diagnosis also was largely rewritten. A fourth edition was rendered necessary by a revival of the use of Franklinic electricity, due to vastly improved appliances, and contained also the extraordinary results following the application of dynamic electricity to cases of extra-uterine pregnancy.

The fifth edition discussed facts hitherto, and even now, but little appreciated, concerning the induction coil, its varieties, and the differential indications for their use. These statements the author deems worthy of careful consideration, and believes that further experience will result in still more important as well as more definite deductions. Within the past two or three years, Apostoli, of Paris, has, by his experiments and the results that he has succeeded in obtaining, greatly enlarged the domain of electricity in gynecology. The revision in the present edition, therefore, has been mainly restricted to this subject, and the chapter on the Diseases of Women almost entirely recast. The methods through which these better results in gynecology are obtained, do but confirm the truth of the observation made in the preface to the third edition, to the effect that the real scientific basis for the use of electricity in medicine and surgery is found in electro-physics more than in electro-physiology.

The Surgical Diseases of the Genito-Urinary Organs, including Syphilis.
By E. L. KEYES, A. M., M. D., Professor of Genito-Urinary Surgery,
Syphilology and Dermatology in Bellevue Hospital Medical College, etc.,
etc. New York: D. Appleton & Co. 1888.

This is a revision of Van Buren & Keyes's Text Book upon the same subjects, and it will be welcomed very heartily by the profession. The original book was in 1874, the time it was issued, a most admirable and complete treatise on the subject; but since that time genito-urinary surgery has made great advances. Litholapaxy has had its birth, and the supra-pubic operation has been restored to new life and favor. The surgery of the kidney has been constructed anew, and a multitude of minor advances has been made. The distinguished author, from his position as teacher and writer on these subjects, was aided

materially in this advance, and we are glad to see that in this new book all obsolete matter has been dropped and so much new matter added that the publishers have found it advisable to set up the entire book anew in type. Among the minor improvements, we note with favor that the author adopts throughout the work the French scale for grading the sizes of instruments. The introduction of an American scale was, we think, due to the writings of Van Buren, but the French scale is now gaining almost universal adoption, and the English and American scales are falling into disuse. The work, as a whole, deserves the highest commendation, and we predict that this edition will be even more popular with the profession than in its time was the original work of "Van Buren & Keyes."

Atlas of Venereal and Skin Diseases, containing original illustrations and selections from the plates of Kaposi and Neuman, of Vienna; Hutchinson, of London; Ricord and Vidal, of Paris, and others, with original text by PRINCE A. MORROW, M. D., Clinical Professor Venereal Diseases and Lecturer on Dermatology, University of the City of New York. Wm. Wood & Co., New York. Mattison, East Eagle street, Buffalo.

In our last number, we acknowledged the receipt of Parts I. and II. of this magnificent work. Fasciculus III. is just received. It contains the following plates: Chancre of fore finger, with syphilide of palm; chancre of nipple, erythematous syphilide, milliary syphilide, papular syphilide, papulo pustular syphilide. The plates are beautiful, and we can only repeat the expressions of admiration which every issue of this great work has elicited from all who have seen them.

Questions and Answers on the Essentials of Physiology, prepared especially for students of medicine. By H. A. HARE, M. D., Demonstrator and Instructor University of Pennsylvania, with illustrations. Philadelphia: W. B. Saunders. 1888.

Essentials of Chemistry and Toxicology, for the use of students in medicine. By R. A. WITTHAUS, A. M., M. D., Professor of Chemistry in the University of New York. Second edition. New York: Wm. Wood & Co. 1888.

"There is no short road to knowledge," but books of the character of the above have a place. In reading the larger text-books, it is undoubtedly an aid to the student to have a compend of "Essentials," by which he can review his knowledge, and fix the most important points more firmly in his memory. Both of these books are good, and are well adapted to the end in view.



AUGUSTUS REGINALD DAVIDSON, M. D.

Died May 25, 1888. Aged 43 Years.



VOL. XXVII.

JUNE, 1888.

No. 11

Original Communications.

AN INQUIRY INTO THE IMPORTANCE OF PHYSICAL CULTURE, AS A BRANCH OF THE SCIENCE OF PREVENTION.

By WM. C. BAILEY, M. D., Albion, N. Y.

GENTLEMEN—The consent to address you to-day was given by me with much hesitation. Not presuming that I might be able to present anything new to such an audience, the hope was cherished that, informally, something might be said to arouse an interest in a subject of growing importance, and prompt further inquiry.

Medical education has, within recent years, steadily progressed; and the faculty and alumni here to-day have just cause for congratulation upon the standard this college has taken in promoting such progress.

But there is another step in advance the future must bring:

We have yet to learn more fully the truth, that the first and grandest obligation the physician owes society and the state is to prevent disease.

We are almost compelled to recognize this advancement, on account of the wondrous progress made in every branch of the

medical art. As a result of etiological research, many causes of disease have been discovered that are now known to be of a preventable nature. And we are beginning to believe, so limitless has been this progress, that, as was recently asserted, there is no physiological reason why life may not be extended indefinitely, provided it were possible for us to comprehend fully and obey implicitly all of nature's laws. Understanding preventive measures to be those which are employed to anticipate disease, and the science of prevention (I do not like that term preventive medicine), as that which concerns the health of the people, it must be conceded that a most essential requisite to perfect health is a well-developed mind and body.

The fact that the tendency of the present age has been almost exclusively to encourage and popularize mental culture, the body only valued as a necessary support of the mind, is sufficient reason to present a subject of this character for your consideration.

The sensibilities of the mind and body are so acute, the fact that the one, either in health or disease, is continually modifying the condition of the other, hardly needs demonstration.

If this be true, it follows that "the highest permanent perfection of the mind may only be found with the most healthful state of the body."

The question then naturally suggests itself: What are the best means to be employed in producing such development?

But before answering, it is indispensable that we comprehend somewhat the nature of this mental and physical co-relationship.

This leads us into metaphysical fields; and the further we extend our studies, the more intricate seems to be the connection, until finally, we are led to exclaim, "Where is the chasm that separates them?"

Does that which we term mind extend to and include the nerve ganglia in remote parts of the body; or are its limits confined within the boundary of the gray matter of the brain and spinal cord; or is it held within that mass that fills the bony vault; or even here may it only embrace those portions that are

the seat of the highest attributes, as ideation, perception, volition?

Self's communication with things external is by means of various movements. These are indicative of what is termed life, and signify a higher or lower degree of intelligence.

In their simplest form, these movements may be represented by two nerve fibers, connecting with each other through or by a nerve cell or set of cells. One of these fibers conducts an external impression to the nerve center. This is instantly transmitted to the other fiber, and motion is produced by contraction or relaxation of the appropriate muscular tissue. For example, in passing through a gallery of paintings, we are suddenly attracted toward a special work of art. The impression received, conveyed to the proper nerve centers, causes us to cease our walking and gaze intently upon the picture. Our own knowledge of this impression is by the movements resulting therefrom—our attitude of silence, our fixed attention. This is a conscious deed, and betokens more or less intelligence.

There are numberless other acts, seemingly performed without our knowledge. In fact, one upon reflection is surprised to learn how large a part of his existence consists of acts requiring scarcely an effort of perception or volition.

The merchant goes to his place of business. His mind is absorbed with anticipated cares. He, however, avoids running into trees or posts, salutes a passing friend, and turns the proper corners on the way. He does not appear to be conscious of these acts; but let him close his eyes, and his steps would occasion confusion, and doubtless injury.

Now, these varied movements may result from heredity, as is instanced in the characters portrayed in the writings of Alexander Dumas; from instinct, all animals displaying beautiful illustrations of this, but, notably, the bee and the ant; from acquired habit, an automatic-like impression (if I may use that term), produced upon certain nerve centers, as the result of frequent repetition of the same act, until finally it becomes inherent, "and it is the desire of the organism to display that function which is embodied in its nature;" and, finally, from an intuition

or cognition implanted within us. This is not wholly instinct, for unlike the latter, there may be improvement in its method. For instance, we intuitively avoid that which, from experience and not from instinct, we know to be injurious.

We have been considering movements resultant from impulses received from things about us.

There are certain indications of the inner processes of the body and mind ; and these are made manifest by what is termed *expression*.

The body exists under certain conditions. Expression is the outward indication of these conditions.

The eager manner in which a child may grasp a glass of cold water, expresses a certain condition of the body we denominate thirst.

Like the movements that concern external stimuli, the variety of expressions is great : the motions of the body, the movements of the hands, the poise of the head, the pitch or tone of the voice, the muscles of the face in their varied attitudes, the color of the cheeks.

Most of these movements and expressions are subject to development, and may be improved by education. In truth, it is in the undeveloped being we find the most expressionless manifestations ; and it is in the perfected manhood we easiest detect character. Here every line seems to display some emotion or feeling. It is thus we read thought. It is the mind visible. This the poet must have had in view when he wrote :

" Her pure and eloquent blood
" Spoke in her cheeks, and so distinctly wrought,
" That one might almost say her body thought."

The greater the development of these inner conditions by expression, then, the greater the intelligence. The paralytic, or the imbecile, may present an almost entire want of this beautiful and useful provision of nature.

Now, may we not ask, " Where is the seat of responsibility of these movements and expressions ? "

In the gradation of animal life, the fish is the first where there is known to be a connection between nerve fibers and sensory ganglia. In the scale below, the brain wholly absent, impressions are received and movements produced, showing that at least in a certain proportion of the animal kingdom, this organ is not required to originate action.

As we ascend the scale, we find the brain gradually is extended in size, and, finally, also in convolution, "through the amphibia, birds, mammalia, higher monkeys, to man; and in the ascent we discover, of course, a gradual development of intelligence.

From the interesting study of these animal gradations which we have thus briefly reviewed, it seems clearly proven, by experiment oft repeated, that not only remote from the brain, but also outside of the spinal cord, are nerve-ganglia originating certain acts, especially of our organic life; and that, located in the spinal cord are functions especially important. Thus the cord itself is not only a conducting organ between external things and the brain, but also contains many independent nerve centers (Maudsley). A large portion of the acts to which we have directed attention, are dependent upon these ganglia for guidance. Pflüger's experiments serve well to emphasize this important point. He pinched the hind foot of a decapitated frog, and it immediately made efforts to draw the foot away. The pressure increased, caused the frog to redouble its efforts. These failing, there was a muscular twitching for a moment. Finally the other foot was used to force the obstruction away. This teaches us that the impression implanted upon the ganglionic centers, called into action the corresponding nerves of the opposite extremity. But this failed also. After a brief period other sets of ganglia seemed to be impressed, and with one convulsive effort the animal leaped away. Here was "an adaptation of means to an end in a headless frog," with an entire absence of its center of nerve force—that organ where it alone supposed to originate movements that have a definite purpose.

To illustrate further, we are reminded of the discussion which D'Israeli says occurred between Cecco and Dante upon

natural and acquired genius. The former claimed that nature is more potent than art, while the Italian poet asserted the contrary, and cited, as an example, that his cat had been taught to hold a lighted candle while he supped and read. He requested Cecco to call and witness the experiment. The invitation was accepted. While the experiment was in progress, the guest suddenly let go some mice he had concealed. The cat immediately forgot its acquired genius and leaped toward the escaping rodents.

"The anencephalic child exhibits movements of its limbs, and cries and coughs."

Darwin's observations upon the manifold motions and expressions of the healthy infant, during its developmental period, are invaluable. To them I can only call your attention.

Are these examples the results of the highest functions of the intellect, or may they be due to reflex action, stimulated by nerve ganglia distant from the brain?

If either, we may inquire with Maudsley, are they mental or physical? If mental, we must enlarge our conception of the mind, and acknowledge it is not wholly confined to the limits of the brain, but includes, as well, portions of the spinal cord, or perchance even ganglia separate from this. If physical, then must we elevate our idea of the value of the body, and deduct functions popularly supposed to belong alone to mind.

We have dwelt thus at length, but very imperfectly, upon these things, to indicate how intimately related are body and mind, how interdependent they are, and how difficult it is to determine the line that separates them. This has seemed requisite, that we may appreciate the importance of caring for the body if we would expand the mind; that physical culture is essential, if we would reach a high mental development. In truth, we must assent, that, to define what and where mind is, and to explain the length, and breadth, and height, and depth, of its relationship with the body, is as much beyond our comprehension as it is for that little animal whose life continues but an hour, to appreciate the geography of a continent.

Our next inquiry here arises: How may perfected manhood be attained? We answer, briefly, by exercise. This, in its lib-

eral and proper signification, means education, labor and recreation, in all their forms. What, to-day, is education, if not a series of graded mental and physical exercises? And what is labor, if not an activity of brain and muscle to accomplish a certain end?

"The frame of every individual," says Maclaren, "bears within itself the germ of its own perfectibility." Now the means whereby such an end may be attained, in its growth and development, is *exercise*, without which life cannot exist. It begins at the cradle, exemplifies itself during the period of growth, and a constitution is formed upon its faithful continuance. This should characterize adult life, in order to preserve the constitution thus formed, for it is that which makes the man what he is.

We need not, to-day, discuss the sort of exercise essential to one's well-being. This varies with and in each individual.

These general propositions, however, should not be disregarded—

First. Beginning with early childhood, there should be a gradual unfolding—an evolution—in the forms of activity, as the system itself grows and unfolds its higher purposes.

To this end, children should be taught habits of exercise and industry, acquired habits, as we have attempted to define them. These should begin with their A B C's, and grow up with them. The system of school education would be advanced, were students, in order to receive their promotion from any grade, required to attain a certain standard of physical improvement, properly proportioned to age, constitution and history; and that they may receive their diploma at graduation, were they expected to possess at least a portion of the physical qualifications demanded by the government to enter West Point or Annapolis. This would popularize the development of physical culture, produce a hardier race, materially lessen sickness, extend life, improve the morale of the people, augment mental capacity, and add wealth to the nation.

Again, to produce harmonious growth, this activity should be of such a character as to develop, and be continued in every part, both of mind and body.

It is this which attains to the name of beauty. In disproportionate development, however slight, there is deformity. This was the Greek conception of beauty—the absence of all deformity. What a complete description? Did you ever think of it? If attempting a sketch of a human figure, do you not paint a perfect one if you deform no muscle, no expression, no organ? If the head be too large, or the chest too narrow, or the nose too rounding, in proportion with the rest of the figure, you have deformity and have not beauty. Can such perfection as the Greeks conceived, and the Creator intended, be realized in the development of mental power and the neglect of the physical, or in the development of the physical and the neglect of the mental?

In either instance, would you observe those expressions depicted upon the face, and in the motions and attitudes of the body characteristic of highest culture? Do you see portrayed in the face of a Sullivan those lines found in complete manhood? Is there not rather a want of expression, as noticeably belongs to the criminal and uneducated classes?

Finally, the end to be accomplished, if we understand these principles aright, is our highest good.

This is health.

Where every part performs perfectly its end, health exists, and love, and happiness, and the other higher moral attributes of our nature, follow.

Disease, suffering, and misery cannot enter here so long as this condition shall continue. When we see man in this, his perfect state, we must acknowledge he exists for something more than selfish ends. In him is developed perfect unity of body and mind, producing harmony and satisfaction, well worthy of the poet's description: "So noble in reason; so infinite in faculties; in form and moving, so express and admirable; in action, so like an angel; in apprehension, so like a God."

*THE RELATION OF PATHOLOGY TO THE PRACTICE
OF MEDICINE AND SURGERY.**

By FRANK W. ROSS, M. D., Elmira, N. Y.

I believe that few physicians and students properly appreciate the value of the study of pathology and its relations to medicine and surgery.

It is the great basis upon which we must work, and without which we are at sea.

The *dry details* of pathological anatomy and pathological processes are not, as a rule, very inviting or entertaining to the student, but the more he enters into practice, the more he sees of disease, and the greater his reverence for this practical line of study in all its departments.

I do not mean simply pathology as studied in the dead-house alone. Pathological anatomy, gross and microscopical, is merely a record and *prima facie* evidence of *what has been done*, but the anatomical part, combined with a knowledge of the *various processes* which bring about the condition, is true pathology.

In "Quain's Dictionary of Medicine," pathology is defined as the "science of disease."

I believe that pathology is the foundation, the basis, for the rational treatment of disease, both medical and surgical.

No one can hope to treat a disease in a rational and scientific manner without a knowledge of its pathology.

To know the changes which the various organs of the body undergo, and the constant pathological lesion of the known disease, is the scientific part of medicine, and is in itself an exact science.

The administration of medicine is, from the very nature of the conditions which surround it, in the main part empirical and experimental.

Here we have not only the changed condition of the body, the abnormal actions of the organs, and the faulty assimilation of a remedy which modifies to such a great extent the action, but

* Read before the Alumni of Medical Department, Niagara University, Buffalo, N. Y., April 10, 1888.

we have also to deal with the *drugs* themselves, which too often are impure, adulterated, or deteriorate from age or other causes, to say nothing of the dishonesty or meddlesome interference of the unscrupulous pharmacist.

All of these have a tendency to place the science of medicine in an unenviable position before the laymen, who believe that every dose of medicine given is an experiment, and consider themselves *too* often to have been the victim of *misplaced* confidence and powerful drugs!

To these they ascribe the unfortunate results or sequels of the disease through which they have just passed, forgetting, or not knowing, that disease in itself *always* leaves its mark upon the body of its victims in some form.

This result, in all degrees of intensity, *is the constant pathological lesion*, and the study of the various processes which produce it, and of the changes of the organs, as seen by the unaided eye and microscope, is the scientific pathology of to-day.

But few physicians, prior to the last decade, were versed in this art, and the present knowledge is the accumulation of the past, and disease is now studied from this, a pathological standpoint: more reliance is placed upon it, the diagnosis, the mapping out of a line of treatment, the prognosis, *all* are shaped from the *pathological lesion*, which is known to exist.

In fact, when we once know the pathology of a disease, we have made advances which eclipse and surpass in every way the experiments and empiricisms of ages.

This disease is isolated from its fellows, and its care and treatment becomes an exact science.

No matter what the result of an investigation may be in a given disease, it may show that a hitherto-supposed incurable disease is curable, or that a supposed curable disease is not curable.

It satisfies the demand of exact science, and it places us upon a firm basis, and mankind is the gainer thereby.

As a result of careful study, the changes in the treatment of fever are simply marvelous.

We have all been told of the old methods of the treatment of fevers, in particular the bleeding, the purging, and the tartar emetic, "just enough to keep the stomach a little sick," the withdrawing of water and of nourishment. They seem a nightmare!

Thanks to our knowledge of the pathology of fever, these things have undergone a revolution. It is no longer the rule to bleed, physic, salivate, nauseate, and starve our patients, but from an exact knowledge of the pathology, the entire line of treatment is changed.

The first thing which is pressed upon the student's mind is the nourishment, the administration of food and drink in proper quantities.

You are taught that *disease itself* is, as a rule, a *depressant* of the vital forces, which must be counteracted by rest, food and, *perhaps, medicine*.

You learn that disease is not *cured* by medicine, but that the *vis medicatrix naturæ* is the all-healing power before which we must bend, towards the maintaining the system and *assisting* nature, our mission is accomplished; few diseases, *if any*, succumb to the simple *vis medicatrix alone!*

You are, to progress in your art, not only obliged to listen to eloquent and instructive lectures, and to read learned and exhaustive treatises, but to stand at the bedside of your patients and watch the signs and symptoms of disease, and when death ensues, you must follow the body to the dead-house, and there study both the gross and microscopical lesions, which are eloquent reminders of the *real causes of* disease, its *symptoms* and course, and an explanation of the fatal termination, it says plainly to us, in the matter of healing art, "thus far canst thou go, and no farther."

It tells you that disease, no matter how simple, is a hydra-headed monster with which we have to cope, and *what* the limit of *restoration to health is* that most so-called cures are merely "a stay in proceedings," and nothing more.

I well remember the first pathological specimen of the ulcerated pyers patches of typhoid fever which came under my eye.

It seemed *impossible* to expect any result by *purely medicinal treatment* of the diarrhœa which resulted. Not long after, a young man, who knew more of medicine than of disease, was asked, as a quiz, his treatment of the diarrhœa in the ulcerative stage of typhoid fever. Said he: "I would use three grains of the sub-nit. bismuth every three or four hours, and check it; the bismuth acting as an astringent upon the ulcers." Whereupon the quiz-master said: "Just imagine that large dose of three grains of bismuth wandering up and down *thirty feet of gut*, saying: 'Whare's that ulcer, whare's that ulcer?'"

The present treatment of those diseases, which have no known constant pathological lesion also in those diseases where there exists a doubt as to the pathology, is unsatisfactory, and must, of necessity, be empirical.

The diversity of opinion of so-called experts in medicine and surgery, and the wide variations of, and seemingly diametrically opposed, methods of treatment of any disease, where the pathology is not known, calls for the condemnation and criticism of people who say that if *we differ* so widely in these respects, there is *no foundation* or basis to medicine, and we are consequently unjustly censured for *not knowing what* no power on earth has yet been able to disclose.

As soon as the pathology is understood, the battle ceases, and a new field is investigated. In this manner, medical science, slowly fighting every inch of ground, while disease stubbornly refuses an advance into her domain, the pathology of disease is gradually unfolding to the ever-watchful and vigilant eye of science, her hidden mysteries and wonderful power for destruction of mankind; the fight is stubborn, uncompromising, and, in some diseases, *days, months*, and even *ages*, fail to reveal the *truth*.

We are just as much in the dark to-day, as to the cause and pathology of *diabetes*, as we were a century ago.

We know that there is a condition of the system, in which abnormal quantities of sugar are present in the urine, and that, as a rule, this disease is progressive and fatal; yet it has no *constant pathological lesion known*; whether it is a disease of the

nerves, brain, or the liver, stomach or kidneys, we are not certain. In some cases, it seems to be one cause; in others, an apparently different state of affairs exists. Hence, we have to-day no rational treatment for this disease which we call diabetes. We only know its constant symptom, but little or nothing of the *disease* itself.

On the other hand, we know so well the pathology of such diseases as typhoid fever and pneumonia, and their constant pathological lesions, that we can tell almost to the hour the changes which the organs are undergoing at a given stage of the disease.

Knowing this, *we have the key* which unlocks the mystery, and which serves as a guide for our *care and treatment*. *Knowing them*, we are prepared to stand on guard, to watch; with jealous and vigilant eye, all the symptoms, and rightly interpret their meaning.

In these diseases, we have reached the acme of perfection in the healing art of the present age, because we have our beacon-light ahead, while we hold the rudder to steer the craft, between Scylla and Charybdis. Although there may be hidden rocks ahead, we are as safe under this guidance as mortal can hope to be. Only the Omnipotent can tell that which is beyond our ken.

To be skilled in the art of medicine and surgery, requires that a physician should know something outside of the action and administration of drugs, or the use of the knife. He must be skilled in the *exact sciences*—pathology, anatomy, chemistry, and physics, etc.—else he is no more a scientific physician than the ignorant quack who promises to cure all the diseases to which the flesh is heir. It is a lack of the proper scientific basis of a medical education, and a failure to study and understand pathology, which leads men otherwise versed in medicine to expect miraculous and impossible cures of known pathological lesions.

The *pathologist* is a *safer man to treat disease* than an *empiric*, yet we often see the *ultra-pathologist*, who considers disease *only* from the *dead-house* standpoint, a signal failure when he attempts to cope with disease, or utterly skeptical as to the efficacy of any remedial agent.

He is apt to undervalue the wonderful restorative power of nature, and forgets that most of the organs of the body are capable of doing more work than is often required of them, and can also assist, for a variable length of time, another organ whose functions may be crippled or suppressed.

This allows the diseased member rest. Notably, the bowels may assist the kidneys, and, by increased activity, carry off the effete material which the kidneys should remove. The kidneys may act for the liver, or the skin for the kidneys, etc.

Thus, by all the organs working in harmony, assisting each other, we are able to pass crises which would otherwise cause a fatal result.

The rectum may be used to supplement the action of the stomach, while all the special senses are aided one by the other. Again, we know of pathological changes producing others to compensate for loss or change of function. Notably, in diseases of the *heart and circulatory system*, we have *cardiac hypertrophy* to overcome the resistance offered by a disease of the arteries, which requires more force to carry on the circulation. Notably, in organic diseases of the valves, where not only hypertrophy is *compensatory*, but an *actual lesion of the valves* will ensue to assist the left heart; for example, a tricuspid regurgitation, when not congenial, is almost always compensatory to a mitral lesion of the left heart.

In the domain of surgery, the study of tumors has been a great boon, and we now know, by the examination of a tumor, whether it is malignant or not, and often base our diagnosis on the microscopical appearance of a few cells.

In the case of the Emperor of Germany's throat, much reflection has been cast on the opinion of expert pathologists, but we must remember that Germany is not America; there, pathology and science must work in harmony with the "will of the Sovereign." The Crown Prince played for a *great stake*. Had his disease been pronounced cancer, he could not, by the laws of the land, be Emperor, which means \$100,000 a year, and to his wife the *title of Empress*.

This will readily explain why we know so little definitely of his case, and why Queen Victoria sent McKenzie to care for the Crown Prince; it *was worth something for her daughter to be the Empress Dowager*. The exact truth of the case may never be known until the death of the Emperor.

The pathology of embolism, from endocarditis, cardiac vegetation, from a thrombus of a vein, with perhaps a resulting paralysis, is easily explained, more readily understood, cared for, and fatal issues often averted.

The pathology of *involution of the uterus* is in itself the guide for the treatment of the lying-in woman.

The arrangement of cells and distribution of blood vessels explain to the merest tyro why *sarcoma* is so apt to be *multiple* and almost always recurrent, while cancer usually advances by *progressing* itself through all the tissues, and rarely in distant parts of the body, except in advanced and ulcerated stages, which places it in the same condition as sarcoma, for in cancer we find the blood-vessels in the stroma; in sarcoma they ramify *among* the cells, offering the best possible means of transportation to various parts of the body.

Thus it is with most diseases we have a ready and rational explanation of the leading symptoms from the pathology.

Our facilities for the study of pathology in general practice are not large, yet if we *make the most of all* the cases that come before us, hold post-mortems whenever we can, we cannot but learn more or less of pathology, even in isolated places.

I have heard the great Marion Sims remark that many of his investigations and original researches were made in a small hospital in his southern home, while he was comparatively a young man, and his future and wider experience only verifies his previous investigations.

If you know all there is to the pathology of one case of typhoid fever, you know entire pathology. One by one, you can study and investigate the pathology and conditions of various diseases, and thus place yourself on a sound basis with which to practice *medicine and surgery*.

Translations.

EPILEPTIC ASTHMA.

By F. A. HARRINGTON, A. M., M. D.

Journal de Médecine de Paris, February 19, 1888.

Taking etiology as the basis of classification, we recognize four varieties of asthma, viz., that co-existing with chronic bronchitis, that with emphysema, our uncomplicated asthma, and cardiac asthma so-called. The last evidently is an intense form of dyspnoea, subordinate to the cardiac affection; but the course of the disease and the clinical history in each of the first two forms of asthma, are conclusive evidence that there exists two diseases, not an essential part of the asthma, but merely associated with it and characterized by sudden asthmatic paroxysms.

During recent years, I have had opportunity to observe several cases that came under my notice; and, after careful thought, I have not hesitated to add to the four universally recognized forms a fifth variety of asthma, to be designated *epileptic asthma*. After a recital of the facts, and an account of the observations, I trust that I shall have proven that the name has been appropriately applied.

In 1881, I published in *Concours Médical*, No. 51, an account of a neurosis of the pneumogastric nerve, with paroxysms varying in intensity, recurring irregularly, and similar to asthmatic attacks. These exacerbations occurred indifferently by day or by night, and lasted nearly twenty-four hours; they were accompanied by chills, which were succeeded by a sweating stage, and occasionally by vomiting. Perfect health followed the attacks. The patient was four years old, and the affection bore a closer resemblance to bronchial asthma than to that of Kopp. I diagnosed an epileptic neurosis, and the mode of treatment, instituted in accordance with that belief, has justified the correctness of my diagnosis.

I have subsequently seen two cases of the same trouble in old men. Here is the clinical history of one: F. G., a farmer, sixty years of age. He has a vigorous constitution, and, until the last few years, has enjoyed immunity from disease. In the haying season of 1884, he had a severe attack of acute bronchitis, which was treated by a physician with the ordinary therapeutic remedies, *e. g.*, tar prepa-

rations, creasote, expectorants, counter-irritants, *et cetera*. The disease baffled all attempts to check its progress, and, soon lapsing into a chronic state, displayed violent asthmatic paroxysms.

During the winters of 1885 and 1886, the patient suffered no particular inconvenience; but the attacks reappeared in the following spring, longer in duration and more painful. Their occurrence was irregular; always by night.

I visited the patient for the first time on February 20, 1887, at three P. M., and, notwithstanding the attack had notably diminished in intensity, it had by no means ended. The patient was sitting on a chair, with body strongly inclined forward, and respiration loud and wheezing. He complained of a pain in the right side, and the arm and leg on the right were colder than those on the left side. The skin looked pallid and death-like and cyanotic in places. The lips were blue; the whole surface of the body was bathed in cold perspiration. No cardiac murmur was audible, but the heart-sounds were so accelerated that the long pause was completely abolished. The pulse was frequent and feeble. Throughout the whole expanse of the chest, a stethoscopic examination revealed sibilant râles. Expectoration was glairy; at times, mucous. Percussion was alike on both sides. The tongue was clean; appetite good; habitual constipation. After a few months, the pain passed from the right to the left side of the body. It may be described as a sort of *aura* premonitory of the impending attack. The patient described it as follows: a painful sensation was experienced in the head, in the left frontal region; thence it extended towards the nipple on the same side. "It twisted the nipple," to use his expression. The pain soon reached the left side of the abdomen. It continued one-quarter to one-half of an hour, compelling him to flex the head upon the breast; after this, an exceedingly intense dyspnoea, that was almost unbearable, commenced. The patient was obliged to arise quickly and to run to an open window for fresh air. When the paroxysm terminated, expectoration became very profuse; sometimes there was a mucous discharge from the right nostril, or vomiting of mucus. Experience had taught him that a little brandy swallowed in coffee during the attack lessened its duration. In rare instances, the migraine, which was marked at the outset, lasts several hours after the attack. When the paroxysm is ended, perfect health returns without exception.

The usual therapeutic agents were ineffectual in this troublesome disease. Oxalic acid mitigated the attacks, but did not prevent their recurrence; morphine was of no more avail. The iodides, administered as a preventive, not only had no effect on the progress of the disease, but seemed actually to exercise an injurious action.

It was then owing to the complete intermittency and other characteristics of the symptoms, as well as to the irregularity of their appearance, that I conceived the idea of combating them with the anti-epileptic treatment. My treatment has been bromide of potassium, in doses of six grams daily, in conjunction with six milligrams of picrotoxine and an equal amount of arseniate of soda. The effect was marvelous, and I have met with astonishing and unfailing success. The paroxysms were almost entirely suppressed at one stroke, as only a single attack occurred at the end of ten days, and it was much milder and, as it were, rudimentary.

What is the nature of these attacks from which F. G. suffered? I shall unhesitatingly designate them as asthmatic paroxysms, but the entire accompanying phenomena differentiate them from the customary attacks of asthma. There is absolute intermittency, and during the interval the patient presents no symptoms of asthma. Such a termination seldom occurs in the more ordinary varieties of asthma, in which you will observe a continual dyspnoea, characterized by paroxysmal exacerbations. They recur, it is true, by night oftener than by day, but at very varying periods: at one time after the lapse of several days, at another time after a number of weeks. Beginning in the night, they prolong themselves the following day, or even longer; they are ushered in by a painful sensation in the head, comparable to an epileptic *aura*. Their termination is marked sometimes by a nasal discharge, sometimes by emesis. Finally, the preventive treatment in vogue for asthma has no efficacy in these paroxysms, while they yield most promptly to the simplest anti-epileptic remedies.

If the neurosis under discussion differs from common asthma in many essential regards, it differs also from *angina pectoris* by a line of demarcation not less evident. In the latter, it is not merely pain that is experienced, but a feeling of impending syncope. Respiration is much less embarrassed; it is but slightly accelerated; nor is it accompanied by any wheezing or other abnormal sound, not even by the sibilant rôle of bronchitis, nor of pulmonary infarction. The suffering is more marked by day, contrary to what is seen in

asthma and in the case cited of F. G. Doubtless, there were in that case pains that had a similarity to those in *angina pectoris*, but their location, course, duration, and characteristics were essentially different; for they began in the face and ended in the abdomen, without localizing themselves in the præcordial space nor radiating into the left arm.

Moreover, they always preceded the paroxysms and, in some instances, continued after them; but they diminished in intensity, or even disappeared, during an attack, while the pain of *angina pectoris* is particularly sharp at the time of the paroxysm, so that the patient aptly compares it to pincers tearing the flesh. As to the duration of the attack, it is longer, by far, than that of *angina pectoris*.

If the respiratory phenomena were incomparably more marked than those of *angina pectoris*, the cardiac symptoms, on the other hand, were less noticeable or entirely absent. What, in reality, is the state of affairs in *angina pectoris*? At the outset of the attack, always sudden, circulation at first seems disturbed; for an instant, the heart ceases beating; then begin strong and rapid pulsations, which continue several minutes, and which an intense præcordial pain succeeds. Concurrently you notice, to begin with, an irregular, slow, and full pulse; soon it becomes accelerated and small. The beat is indistinct, rapid and fluttering. In short, the signs of arterio-sclerosis, so often a feature of *angina pectoris*, are entirely lacking in the case of F. G.; and, while death is the rule in this painful trouble, epileptic asthma has invariably yielded to appropriate treatment.

I have not, then, a case of every-day asthma, nor of *angina pectoris*. Had I made only a stethoscopic examination, I might have diagnosed a very acute capillary bronchitis; but, after studying the course of the malady, I immediately discarded that hypothesis as inadmissible. In fine, the sudden invasion, without any assignable cause; the duration much briefer than that of the accompanying bronchitis; the sudden disappearance at the military hour, so to speak; the inevitable and periodic return of symptoms, reëstablishment of customary health during the intervals, success foreseen and assured by anti-nervous medication—here, surely, is a grouping of signs belonging to a neurosis, I can confidently assert to an epileptic neurosis seated in the ultimate filaments of the pneumogastric nerve.

To sum up all, I will state that, in my opinion, there are true epilepsies that do not manifest themselves by the customary train of

cerebral symptoms, as seen in a severe epileptic attack; but by certain symptoms of asthma, modified and aggravated by those of the epileptic neurosis, and relieved by the curative treatment of epilepsy, though unaffected by that of true asthma.

Physicians, up to the present time, have failed to differentiate between the epileptic neurosis and ordinary asthma.

It is conceded that we admit that nervous disturbances arise in asthma, particularly convulsive movements of divers parts of the body. Laënnec mentions the loss of consciousness. We are justified, it seems to me, after a consideration of the complex symptoms, in placing the disease in the group of epileptic neuroses.

The symptoms noticed in the patient to whom I have referred, prove that the paroxysms originated in the terminal filaments of the pneumogastric nerve in the lungs and stomach, and that the laryngeal nerves were exempt from any functional disturbance.

Precisely an opposite state of affairs exists, as we have determined, in an affection which we can compare with the preceding, as regards its nature and treatment efficacious to overcome it. I refer to *thymic asthma*, or the *asthma of Kopp*. In this, instead of the catarrhal symptoms of suffocation, spasm of the glottis takes place.

"Thymic asthma occurs in infancy, from the age of three weeks up to eighteen months. It is attended by bronchial spasms, which are paroxysmal; respiration suddenly stops, and you will perceive only a very short, high-pitched, and whistling inspiration; the air passes difficultly through the contracted glottis. The sharp cry, accompanying inspiration, is heard either at the commencement of the paroxysm, when it is soon stifled by suspension of respiration, or at the end, when the infant begins to breathe again. The cry is constant and pathognomonic of the disease. The other symptoms happening during the paroxysm result, naturally, from failure of respiration. The child flexes the trunk forcibly back, or, if the attack is severe, falls backward. The face has an expression of anxiety; it is livid at first, then pallid; nostrils dilated; eyes fixed; hands cold; thumbs pressed into the palms; evacuations may be involuntary. The attack lasts one-half, one, and sometimes two or three minutes; then the patient cries for a time and is uneasy, but soon regains his customary good spirits. During the intervals, the child is healthy, as much so as other children. The attack of suffocation begins, as a rule, when the infant awakes, cries, frets, or attempts to swallow

quickly. At first the attacks take place at intervals of eight days or more, but, gradually becoming more frequent, they appear as often as ten to twenty times daily. Death commonly supervenes at this period in the middle of an attack which comes upon the infant when laughing and playing; but more often the patient passes to the second stage, that of *general epileptiform convulsions*. The epileptic attack and the asthmatic do not always coincide, but oftener alternate." (In *Medical Gazette*, 1836, p. 21.) We may, with propriety, add that the first paroxysm occurs indifferently by night or day, and that the disease is essentially chronic.

Dr. Kopp, of Copenhagen, and, more recently, Dr. Hirsch, of Königsberg, have ascribed it to hypertrophy of the thymus gland. Caspari and Pagenstecher, on the contrary, consider the alteration of volume, if existing, as an effect, and not a cause, of this infantile asthma, which they properly compare to an affection of the pneumogastric nerve.

The researches of Herard demonstrate that the thymus gland is sometimes small, sometimes enlarged, depending upon whether the infant is delicate or robust; but the degree of its hypertrophy makes no material difference as to the recurrence of the spasm of the glottis.

What, then, is the so-called thymic asthma?

Believing that the symptoms of that disease pointed clearly to an epileptic neurosis of the laryngeal filaments of the vagus nerve, I have observed, as a confirmation of that belief, in purely asthmatic attacks accompanied exclusively by spasm of the glottis, something analogous to epileptic vertigo, which precedes the convulsion, and I have marked another symptom of true cerebral epilepsy when, in the course of the attack, some general epileptiform spasms were added. Induced by these theoretical ideas, I became convinced that the treatment would be a good test; and only last year I had an opportunity to try the anti-epileptic treatment. The patient was an infant, ten months old, presenting symptoms of the asthma of Kopp. The result has justified my conceptions, for I have had the satisfaction of thoroughly uprooting the morbid process.

The prognosis of that disease, up to this time, was regarded as very unfavorable and invariably fatal whenever there were added any epileptiform convulsions. I am inclined to think, thanks to the new treatment, that, in general, we may entertain hopes of saving these little patients.

Conclusions.—A form of bronchial asthma is met with, that I consider merits the name of an epileptic neurosis of the gastro-pulmonary filaments of the vagus nerve.

That disease, up to the present time, has not been differentiated from ordinary asthma; it is characterized by varying paroxysms, succeeded by health. These attacks are preceded, in many instances, by pain in the head, comparable to an epileptic *aura*, and they happen by day, or last during it, vomiting being a frequent symptom. What particularly signalizes the affection, is that it is not improved by the routine treatment of asthma, but, on the contrary, successfully combated by that of epilepsy.

You will observe that the distinguishing characteristic of the new variety of asthma, that I am seeking to introduce into the nosological catalogue, has an important practical bearing; for it guides us to follow a new line of treatment, of remarkable efficacy.

The asthma of Kopp, in accordance with my hypothesis, can be nothing else than an epilepsy analogous to asthma, and I designate it as epileptic asthma. Its treatment is the same as that of epilepsy, as one observation has proven. It has this difference, that, instead of emanating from the gastro-pulmonary filaments of the vagus nerve, it has its seat of origin in the laryngeal filaments of the eighth pair of nerves. Such difference is of no practical importance.

342 Fourteenth Street, Buffalo, N. Y.

Miscellany.

A STRANGE CASE OF STONE IN THE BLADDER.—It seems that followers of the Taoist religion, which is one of the three great religions of China, are in the habit of introducing short bougies into the penis at night, for the purpose, as they express it, of "keeping the paths of life open." Even the priests expose themselves and contract gonorrhoea, and, as a result, have strictures, but they do not think of one being the result of the other, but consider it some act of the gods or demons, so they keep these little bougies (generally of metal) in the penis at night, being careful to lie upon the side. They are sworn to secrecy as to this practice, but in dealing with these two cases, the secret was divulged, though very reluctantly. In both of

these cases, the instrument used to keep the "paths of life open" was a short piece of ivory chop-stick, about two and one-half inches long, which had slipped into the bladder and became the foundation of a calculus. One had been in twenty years. There are, no doubt, other rites of these heathen religions which are as absurd and dangerous as the one referred to.—*Indiana Medical Journal*.

WE have received an announcement of the Medical and Pharmaceutical Congress, to be held in Barcelona, Spain, September 9th to 15th next, at the time when the International Exposition is also in session at the same place. Physicians from all parts of the world are invited to participate. Papers may be presented in any language, but must be accompanied by a summary in Spanish. Physicians contemplating a European visit this summer, will do well to take advantage of this opportunity to acquaint themselves with the condition of medical affairs in Spain. Those desiring to attend should address Dr. Rodriguez Y. Mendez, editor of *La Gaceta Medica Catalana*.

DR. W. H. L. HALE, of Philadelphia, regards bismuth salicylate as a very valuable remedy in the treatment of bowel troubles. He prescribes it in cholera morbus, dysentery, the diarrhœa of typhoid fever, and tuberculosis, and also in dyspepsia, where there are acid eructations, heart-burn, etc. To an adult he gives fifteen to thirty grains, frequently combining it with bismuth subnitrate. He finds the remedy useful also as a local application for obstinate pruritus.

WE have received from Frank S. Billings, Director of the Pathological Biological Laboratory of Nebraska, an elaborate report of his investigations regarding the nature of the Southern cattle plague, Texas fever. The author has done excellent work, and is certainly honest, if not accurate, in his conclusion that he has discovered the true germ of the disease. His comparison of the cattle plague with yellow fever will be of special interest to physicians.

DR. WM. TREMAINE, U. S. A., has recently returned from his California trip much improved in health. He intends to reside in Buffalo, and devote himself exclusively to surgical practice.

A FUND of \$10,000 has been offered by the family of Cabot, of Boston, the income of which is to be used as a salary for the Pathologist of the Massachusetts General Hospital. Dr. W. F. Whitney, of the medical school, has accepted the position, with title of Assistant Pathologist.

DR. WILLIAM S. BRYANT, of Boston, claims to have discovered that, in the majority of young infants, the portal and mesenteric veins are provided with valves. The discovery is only of interest in connection with the study of development.

A RUSSIAN chemist has discovered that many of the preparations of cod liver oil and olive oil in his country are adulterated with coal oil products. Some preparations contain as high as fifty per cent. of the coal oil, without affecting the taste or appearance.

THE excessive secretion of gastric juice has been designated *gastrosuccorrhæa*, in which the Latin *succus* is unfortunately sandwiched in between two Greek words. It would have been quite as easy to form a pure Greek derivative like *gastrochylorrhæa*.

THE Buffalo Medical and Surgical Association has elected the following officers for the ensuing year: President, Dr. P. W. Van Peyma; Vice-President, Dr. A. A. Hubbell; Secretary, Dr. Trowbridge; Treasurer, Dr. F. E. L. Brecht.

MR. T. B. CURLING, well known for his work on the "Testis and Rectum," died at Cannes, in March. He discovered the association of burns on the skin with ulcers of the duodenum.

DR. WM. C. BAILEY, of Albion, who has been a frequent contributor to the JOURNAL, was recently elected President of the Central New York Medical Society.

DAROZIEZ has demonstrated the existence of a sphincter surrounding the foramen ovale in the foetal heart.

THERE are six claimants to the discovery of the cancer bacillus. Germany has two, Italy two, France one, and Brazil one.

It is said that Sir Morell Mackenzie's London practice is worth \$75,000 a year. He often sees from sixty to seventy patients a day.

CHARITY HOSPITAL, New Orleans, treats 25,000 people yearly. As a teaching hospital, it has no superior, and few, if any, equals in the United States.

Selections.

A GERMAN VIEW OF INTUBATION OF THE LARYNX.

At the Seventeenth Congress of the German Society of Surgery, held in Berlin, April 4-7 ult., Thiersch, of Leipzig, gave his experience with O'Dwyer's method. He has performed intubation of the larynx in thirty-two cases of diphtheritic croup. In fourteen of these, he was obliged to remove the tube and perform tracheotomy, on account of attacks of suffocation. Only three patients got well after intubation, and without tracheotomy. He attributed these rather discouraging results to the exceptional gravity of croup in Leipzig. Intubation, Thiersch says, may be substituted for tracheotomy, in cases of croup where there is only a limited neo-membranous formation and no swelling of the vestibule of the larynx. On the other hand, when the epiglottis is tumefied, or when there is swelling of the mucous membrane below the vocal cords, or when there is an abundant membranous formation, tracheotomy is obligatory, and intubation can do no good.

In favorable cases, amelioration appears immediately after placing the O'Dwyer canula in the windpipe.

Some of the inconveniences of intubation (to say nothing of its difficulties) are as follows: Deglutition is badly performed; the child swallows the wrong way. This is due to the presence of a stiff, open tube in the larynx, and there is also danger of

In each of these cases, the membrane is said to have disappeared in from three to six days. Taking into consideration the fact that these cases were cured so rapidly, the author believes them to have been cases of acute tonsillitis modified by an existing epidemic of diphtheria. In true diphtheria, however, the author claims that benzoate of sodium will soften the membrane, control the fever, and materially shorten the duration of the disease.

INTRA-UTERINE TAMPONING.

The subject of tamponing the uterus has just been revived by Doctor Duhrssen, who has obtained excellent results. Auvard, who successfully employed the method in a bad case of hemorrhage, inclines to the belief that it will prove valuable in puerperal septichæmia. He states as the two principal indications for use of the tampon:

1. Severe *post-partum* hemorrhage.
2. Septichæmia, arising from curetting or other operation interior of uterus.

You perform the operation as follows: Cleanse antiseptically vulva and vagina, and then pull the uterus towards you. In case of *post-partum* hemorrhage, it is unnecessary to move the uterus, as the hand can be passed directly into its cavity. Free the uterus of any clots or other material, if it be a case of septichæmia. Take a piece of iodoform gauze, about fifteen feet in length, six inches in width, and sufficiently thick, and insert this either with finger or hand, according to circumstances, into the uterus. Leave an end of the gauze in vagina. Compress the abdomen with a binder or corsets. After twenty-four hours, the tampon is removed by traction on the piece of gauze at the vulva.—*Lyon Medical*.

INCUBATION AND GAVAGE.—At the February meeting of the Obstetrical Society of Philadelphia, Dr. Hirst exhibited the incubator in use at the Maternity Hospital. It is a simplified Crede's incubator, a double-walled bath-tub made of copper; hot water is poured into the space between the walls, and a tem-

perature maintained within the tub of nearly 100° Fahr. He also described, in all its details, the system of gavage in use at the same hospital. It consists in forcing into the child's stomach, through a soft rubber catheter, by means of a small glass syringe, about 1½ drachms of human milk every hour. A table showing the daily weight of a premature infant, born at the twentieth day and treated by this method, was presented. The child weighed, at first, 1080 grammes; at the end of the first month, the weight was 1460 grammes. Tarnier, instead of a syringe, uses a glass in this treatment.—*Col. and Clin. Record, March, 1888.*

STATISTICS OF DEATH FROM POISON.—There were in Great Britain, in 1886, 511 deaths from poison, including cases of chronic poisoning by lead. Of these, 327 were accidental, 178 suicidal, and only six homicidal. Lead heads the list of agents giving rise to accidental poisoning (95 cases), then follows opium and its derivatives (82 cases); carbolic acid (20 cases); belladonna is responsible for 9 cases; alcohol for 7; aconite, chlorodyne, and hydrochloric acid, each for 6; prussic acid, ammonia, and strychnine, each for 5. Carbolic acid was selected by 42 suicides; opium, laudanum or morphine by 41; oxalic acid by 28; prussic acid by 25; vermin-killer by 18; hydrochloric acid by 15; strychnine by 14. Sulphuric acid and arsenic have lost their popularity, the former having been used by only six and the latter by five persons. One is said (in the official report) to have died from "bichlorate" of potash, another from "bisulphate" of carbon and three from "mercury," probably in accordance with the verdicts of coroners' juries.

ECZEMA OF THE NASAL ORIFICE.—In the *Archiv. für Kinderheilk.*, Bd. ix., Herzog says that, in the greater number of cases, the eczema is combined with scrofula. In all cases, he has found chronic rhinitis coexistent. The affection is sometimes complicated by erysipelas or furunculosis, and he relates six cases of this complication. In adults, the affection is sometimes not easily differentiated from sycosis. The treatment of the author consists in the applications of ointments, of yellow oxide of mercury and vaseline with lead.

WHAT MEDICAL MEN SAID OF ANÆSTHETICS FORTY YEARS AGO.—Commenting on the reports of the first use of ether as an anæsthetic in surgery, the Philadelphia *Medical Examiner* expressed the views of the conservatives in the following terms : "We are persuaded that the surgeons of Philadelphia will not be seduced from the high professional path of duty into the quagmire of quackery by this will-o'-the-wisp. * * * We cannot close these remarks without again expressing our deep mortification and regret that the eminent men who have so long adorned the profession in Boston, should have consented for a moment to set so bad an example to their younger brothers, as we conceive them to have done in this instance. If such things are to be sanctioned by the profession, there is little need of reform conventions, or any other efforts, to elevate the professional character; physicians and quacks will soon constitute one fraternity."

UTERUS: INDICATIONS FOR WASHING OUT.—According to a writer in *El Siglo Medico*, the following are the indications for the use of the intra-uterine antiseptic douche :

1. Fetid lochia with elevation of temperature.
 2. Incomplete expulsion of the placenta.
 3. Retention of membranes.
 4. Birth of a putrid fœtus.
 5. Slow involution of the uterus, due to the retention of clots.
 6. Septichæmia coming on late in the puerperal period.
 7. Cases of flexion of the uterus, which prevent the escape of the lochia.
 8. When, after abortion, it is found necessary to curette the uterus.
 9. Whenever it has been necessary to introduce the hand into the uterus.
-

IS THERE A BACILLUS OF CARCINOMA?—Senger has made two hundred bacteriological experiments with ten pieces of various kinds of carcinoma. He has utilized all the known means of culture, following scrupulously Scheurlen's process.

The results have been negative, and Senger's conclusions are as follows: We cannot, by means of all the genuine methods, succeed in cultivating in fragments of cancer a bacterium or a coccus which has any connection whatever, from an etiological point of view, with carcinoma. It is not necessary, in order to trace bacteria, to believe that carelessness has introduced them into tumors; it is known that microbes introduce themselves into the galactophoric canals, and may thus gain entrance to the organism. Senger claims that the isolated bacillus cultivated and described by Scheurlen is only a bacillus of the potato, completely inoffensive. The bacilli of the potato, which, up to the present time, have not been carefully studied, are often found accidentally, and are not at all pathogenic. These bacilli grow upon potatoes by a pellicle which is waved and wrinkled; they dissolve gelatine and form on it also a pellicle. Scheurlen has certainly been misled by this inoffensive microbe.—*Le Progrès Medical*.

SUBSTITUTES FOR DIGITALIS.—Professor Luciani finds, after a careful study of the various agents that have been introduced as substitutes for digitalis, that strophanthus and adonis vernalis have nearly the same action on the heart that digitalis has, and are to be preferred, because they have no cumulative action and no injurious influence over digestion. Caffeine does not answer the purpose so well, and is apt to disturb digestion. Lily of the valley is greatly inferior in activity, although, in some mild cases, it may be useful. Sparteine is of no practical value, having little influence over irregular heart action, and producing, moreover, headache and other disagreeable effects.

THE TREATMENT OF WHOOPING COUGH BY INTRAL-NASAL INSUFFLATIONS OF ANTISEPTIC POWDERS.—(Barbot: These, Paris, 1888.)—This is a thesis inspired by Dr. Moigard, who is making general, in France, the treatment of whooping cough by nasal insufflations, and in which the author makes a very interesting biographical study of the question. He says the treatment shortens the duration of whooping cough, diminishes the number

and violence of the coughing attacks, and causes the vomiting and hemorrhage to cease. It is an important work.—*Journal of Laryngology*.

FORMULA FOR SALOL.—The *Bul. Gen. de Therapeutique* contains the following formula for salol :

1. For burns, as a liniment application :

	PARTS.
R̄ Ol. Olivæ	60
Salol	10
Siq. Calcis	60

M. S. Liniment.

2. With collodium, for fissured nipples :

	PARTS.
R̄ Salol	4
Solve in—	
Aetheris	4
Adde—	
Collodii Elastici	30

3. Salol cotton is prepared by dipping cotton in a solution of equal parts of salol and ether. The ether evaporates and the salol remains equally distributed in the cotton.

AN INHALATION FOR PHTHISIS.—In the *Rev. du Therapeutique* for December 1, 1887, Filleau and Petit give the following formula for inhalation in phthisis :

R̄ Carbolic Acid	gr. 30
Essent. Terebinth	3 12 ½
Essent. Picis	3 5
Eucalyptol	3 7 ½
Chloroform	gtt. 5

M. S.—To be inhaled four to six times daily, for five minutes at each sitting.

CHRONIC GONORRHOEA.—Unna :

	PARTS.
℞ Ol Theobromatie	100
Ceræ Flavæ	5
Argenti Nitratis	1
Balsami Peruviani	2

M. S. Introduce a sound smeared with this preparation. If no benefit after three or four applications, repeat treatment after several days.

SCABIES.—Kaposi :

	PARTS.
℞ Naphthol	15
Sapo Viridis	50
Cretæ Præparatæ	10
Adipis	100

M. S. Apply but once, after which powder with starch.

GERANIUM MACULATUM IN CHRONIC BRONCHITIS.—The *Journal de Medecine*, of March 11, 1888, gives the following as a useful prescription in chronic bronchitis and bronchorrhœa :

℞ Tinct. Nucis. Vom.	℥ 1.
Tinct. sanguinariæ	℥ 1.
Ext. fluid. geranii.	℥ 1½.
Syrup. simpl.	℥ 11¼.

Of this, a drachm should be taken every four hours.—*Medical News*, April 14, 1888.

THE TREATMENT OF CONVULSIONS IN CHILDREN.—Simon has found the following, by rectal injection, most useful :

℞ Chloral hydrat.	gr. 15
Tinct. mosch.	gtt. 20
Aquæ	℥ 12½ to 15

This may be given in two rectal injections, care being exercised to avoid violence, which may irritate or injure the bowel.—*Gazette Medicale*, March 3, 1888.

PHENACETINE.—Dr. Robert Bell, writing to the *British Medical Journal*, says: "Will you permit me to call the attention of the profession to a new antipyretic and antineuralgic agent called 'phenacetine,' though, correctly speaking, it bears the chemical name of para-acetphenetidin?"

"It can be given with perfect safety, in doses of from eight to twelve grains, every four hours. Phenacetine is a febrifuge which compares favorably with any of the modern antipyretics in the certainty of its effects and freedom from evil consequences. In fevers, its administration is followed by relief of the symptoms, and in sciatica, in which I have employed it very frequently, its utility cannot be overrated.

"Phenacetine is a white, crystalline powder, soluble with difficulty in water, but easily so in hot alcohol."

DYSMENORRHOEA.—Calvin:

℞ Tr. Gelsemii
 Tr. Camphoræ
 Tr. Opii Camphoratæ aa ʒ ij
 M. S. Thirty drops every two hours p. r. n.

DYSMENORRHOEA.—Bartholow:

℞ Ex. Stramonii
 Ex. Hyoscyami
 Ex. Opii aa gr. vj.
 M. et f. pilulas No. vj.
 S. A pill every three, four or six hours.

ERYSIPELAS.—Fothergill:

℞ Plumbi Acetatis gr. x.
 Tr. Opii ʒ iv.
 Aquæ ʒ xx.
 M. S. Apply in charpie and cover with oiled silk.

MAGNESIUM SALICYLATE.—This salt, which is recommended by Huchard in the treatment of typhoid fever, is easily prepared by dissolving salicylic acid in boiling distilled water and saturating the hot solution with magnesium carbonate. It crystallizes in colorless needles, readily soluble in water and alcohol.

PEROXIDE OF HYDROGEN, according to Dr. Love, of St. Louis, is a most valuable agent in the treatment of diphtheria, ozæna, and in all cases of cancerous ulceration and of suppuration or necrosis. He employs it in a solution containing 0.5 to 3 per cent., using most frequently, however, a strength of one per cent., diluting the commercial "ten volume" peroxide with two or three times its volume of water. Of its value in clearing away and effectually deodorizing the decomposing exudate in cases of diphtheria, he speaks in the most emphatic terms, and he regards the remedy also as one of great usefulness in scarlet fever, whooping cough, and other specific diseases.

ANTIPYRINE IN OBSTETRICS.—In twenty cases, Queirel has used antipyrine; in fifteen of them with good results. Four grains can be injected subcutaneously, and repeated if there is no relief. Its action is felt in from twenty to twenty-five minutes. It is particularly valuable during dilatation of os. The woman scarcely feels the pains, and the contractions continue with regularity until complete dilatation.—*Journal de Medecine de Paris*.

MARSON'S TEST FOR SUGAR IN THE URINE.—Dissolve two grains of ferrous sulphate in about 150 minims of the urine, add five grains of caustic potassa, and boil. A dark green precipitate forms if sugar is present, and the supernatant liquid is reddish brown or black, according to the amount of sugar. When sugar is absent, the precipitate is greenish brown in color, and the liquid is colorless.—*London Medical Recorder, Feb. 20th*.

GLYCERINE IN ENEMATA.—Fifty drops of glycerine, injected into the rectum, is a very efficient remedy for producing energetic and copious dejections. The action is dependent upon the property of the glycerine attracting water. There is a transfusion of water from the intestinal walls into the canal, followed by an afflux of blood to the parts and consequent desire to defecate.—*Medical Record*.

It may not be generally known among physicians that the bromide of lithium is almost a specific for muscular rheumatism.—*Bartholow*.

Editorial.

IN MEMORIAM.

AUGUSTUS REGINALD DAVIDSON, M. D.,

Died May 25, 1888, aged forty-three years.

This number of the JOURNAL conveys to our readers a heavy sorrow in the announcement of the death of our esteemed collaborator, Dr. A. R. Davidson, who for many years has been associated in its editorial management. Dr. Davidson fell a victim to adynamic pneumonia, after a very brief illness. The contents of this number were arranged by his hands, and on his sick-bed he gave directions as to original communications, and entrusted to Dr. Campbell, the associate editor, the work of making the selections. So sudden was the fatal termination of the disease that, among the profession in the city, many were taken by surprise when the sad event was announced in the secular press.

Dr. Davidson was born in the province of Ontario, April 11, 1845, and was educated chiefly under the direct personal supervision of his father, who was a highly-educated clergyman of the Anglican church. Through the influence of his brother, his early life was devoted to the drug business, which gave direction to his future course, in affording him the opportunity to cultivate his taste for chemistry, for which he early manifested an aptitude. In 1868, he attended a course of medical lectures at the University of Michigan, with a view to the profession of medicine, to which his attention was directed, through the failure of commercial life, to satisfy his scientific and intellectual tastes. Circumstances interfering with the immediate consummation of this plan, he came to Buffalo in 1869 and assumed the management of Peabody's drug store, at that time the most extensive establishment in this city, a position he filled with great ability, securing, in a larger measure than is usual, the confidence of the profession, in the intelligence and experience he brought to his duties. For a

brief period, he afterwards engaged in the drug business on his own responsibility, at the corner of Main and Chippewa streets, which gave him the means to complete his medical course at the University of Buffalo, from which he took the degree of Doctor of Medicine in 1878. During the year or two previous to his graduation, he assisted Professor Charles A. Doremus in the course of chemistry, delivered by that accomplished teacher, in the college. In 1878, with Drs. Howe, Van Peyma and Mynter, and the writer, the BUFFALO MEDICAL AND SURGICAL JOURNAL was purchased of the late Dr. Julius F. Miner, and Dr. Davidson assumed the business management, and aided materially in the editorial work. On the resignation of Dr. E. V. Stoddard, of the chair of Materia Medica in the Buffalo Medical College, in 1881, Dr. Davidson was requested, by the late Professor James P. White, to accept the position of lecturer, and he gave, in the session of 1881 and 1882, a course of lectures on materia medica and therapeutics, for which his extensive, practical knowledge of the subject and scientific tastes peculiarly fitted him. In 1882 and 1883, he passed several months in Philadelphia, taking the post-graduate course, at the completion of which he went to London, and specially studied renal and skin diseases, with a view to engage in this specialty in his future practice. At the organization of the Medical Department of Niagara University in 1883, he accepted the Professorship of Medical Chemistry, Toxicology and Dermatology, which he held at the time of his death, and the trustees of the University, in acknowledgment of his fidelity to the high position to which he was called, conferred upon him, in 1886, the degree, "*Ad eundem Doctoris in Medicina.*"

With this brief outline of his personal history and his life, it will be justly inferred that Dr. Davidson depended upon his own energies and ability for his success. He possessed an unusual aptitude for scientific investigations and research. He was an accomplished chemist, and his accurate and skillful analytical work gave him the leading position as a chemist in this section of the Empire State. It is to his indefati-

gable labors and industry that every step in his onward progress was due. He was strong in his principles and in the advocacy of them. He was just and honorable in all his dealings. Indeed, it may be said that he was at times misunderstood in the attitude he assumed on many important questions which have divided the profession in this city, on account of his conscientious purpose to be *just* in his position towards antagonizing elements.

Dr. Davidson was strong in his religious convictions and principles. He accepted the teachings of the Catholic party in the American church, and his daily life exemplified the faith he embraced. His honesty and consistency were carried into all his public and private duties. The confidence of the profession and the community in which he lived, were attested at the solemn services at his funeral, and in the expressions of sympathy which his too early death called forth.

It may be said in truth, that this life which promised so much for him in a field of professional labor peculiarly adapted to his tastes and acquirements, was cut short by overwork. He was unceasing in his labors and studies, and gave himself but little of needed rest and recreation. The loss sustained by his inopportune death seems to us irreparable. The void is difficult to fill in the profession, in the college in which he was a most successful teacher, and in the community, of which he was an honored and respected citizen. To his associates on the JOURNAL, he was endeared as only a just and noble man could be esteemed, and we part with him with loving memories of past associations, with deep appreciation of his moral, intellectual and professional worth, and with devout thankfulness that the profession of medicine should be chosen by a man so pure and just, so noble in his aspirations, and earnest and honorable in his life-work, as the congenial field in which to consecrate the superior gifts with which he was endowed.

We append the action of the Faculty of the Medical Department of Niagara University, and of the County Medical Society, which truthfully portrays the high estimation in which he was held by those who knew him most intimately:

Entered into rest May 25, 1888. Augustus Reginald Davidson, M. D., Professor of Medical Chemistry and Toxicology in the Medical Department of Niagara University.

Death has entered again our faculty and removed one of the most beloved of our members. An earnest student, an apt and successful teacher, a physician endowed with fine intellectual gifts and broad and thorough medical attainments, Prof. Davidson had already risen to a position of influence in his profession, and commanded in a rare degree the confidence and respect of the community. It is acknowledged that in his special work he was unequaled, and his judgment and skill were sought by his brother physicians. He was strong in his convictions of right, and possessed the courage of expressing and adhering to the high principles which he had established as the rule of his life. Few men reach at his age the high position in the profession which his energies and ability had already commanded. The loss of such a man is felt beyond the circle of friends and acquaintances, for the world recognizes noble gifts and conscientious devotion to duty such as were exemplified in the life now brought to its close.

We desire to express to the family of our deceased associate the deepness of sorrow we feel at the loss of a noble son and brother, a faithful husband and a loving father. We join in their bereavement, for the loss is not theirs alone; it is ours. We feel that the deep devotion to religious principles and duty which characterized his life, brings the reward promised to faithful stewardship. While humbly submitting to the divine will which takes from our work a brother beloved, and a teacher eminent and successful, a citizen of honor and uprightness, a physician of rare attainments and skill, we express our thankfulness for the example of such a life.

The Erie County Medical Society, at a meeting held May 26, 1888, adopted the following memorial:

IN MEMORIAM.

AUGUSTUS REGINALD DAVIDSON, M. D.

Died May 25, 1888, aged 43 years.

The medical profession of this city and county are summoned again to recognize the strong arm of death, which has suddenly taken from us a Christian gentleman, an honored citizen and an accomplished physician. We desire to bear testimony to the assiduous labors and steadfastness of purpose which has made his life an example worthy of imitation. He was endowed with superior natural gifts, and with high and noble aspirations, in the profession to which his maturer years were devoted. He had consecrated every effort of mind and body for the high office of a physician, and while he had not yet attained the meridian of life, he had reached an eminence in professional circles which were the deserved reward of his industry and labors.

This society, of which Dr. Davidson was an honored member, desires to place on record its high appreciation of his moral and intellectual worth, his superior scientific and professional attainments, and with pride to note the rapid progress he made towards the goal of his ambition, a life of usefulness towards his fellow-man. We

desire to bear our testimony to his sound judgment as a diagnostician, to the broad professional culture which made him an exceptionally accurate therapist, and contributed to his success in the special department of medical science to which he devoted his energies. We also recognize in his life a rigid adherence to principle and to duty, and an earnest conviction that the medical profession claimed from him the consecration of every power he possessed of mind and heart for the noble office of a "healer of the sick."

We beg the precious privilege to share with the family of our deceased associate in the sorrow this untimely death has brought to them. Their loss is greater than any words of ours can express, and we pray that our sympathy may assuage in a measure their grief. While bowing to the divine will which takes from the scenes of active life an honored physician, a devoted husband and father, we have reason for thankfulness that our profession was the chosen field, and furnished the incentive for the noble qualities of head and heart which his life so beautifully exemplified.

THE OLIVE BRANCH IN MEDICAL POLITICS.

In August, 1885, the Buffalo Medical and Surgical Association departed from the original purpose of its organization in devoting one or more of its meetings to the investigation of the accuracy of hospital statistics. This action was inspired by the publication at that time of the annual report of the Buffalo Hospital of the Sisters of Charity, which presented to the profession the record of its work for the preceding year, the success of which called forth the criticism of the friends of a rival hospital, and the Association was chosen as the most available avenue to give such investigation the widest publicity. At that meeting, the aforesaid report was referred to a special committee, which assumed the authority to interrogate the authorities of the hospital to search the records of the Board of Health, and to summon the medical and surgical staff as witnesses, in search of facts by which to justify their action. The committee presented to the Association a lengthy report, detailing the results of their fruitless search, and concluded by recommending for adoption a resolution directing "the attention of the members to the importance of accuracy and precision in the construction of hospital reports which are intended for publication."

As a consequence of this action of the Association, the members of the hospital staff, composed of many of the most

influential members of the profession in the city, several of whom were ex-presidents of the Association, feeling the insult offered to the institution with which they were identified, and to themselves personally, have been conspicuous by their absence at the subsequent meetings of the Association, the attendance of which has dwindled down, until the Association, once the pride of the profession of Buffalo, has become a discredit and almost a disgrace to the profession of our city.

At the annual election in April last, an effort was made to harmonize the disaffected elements by the election of a member of the opposition to the position of vice-president, with a view to bring in the honorable professional gentlemen with whom he was identified. As a further inducement, at a meeting of the Association subsequently held, the following resolutions were adopted :

WHEREAS, The usefulness of this Association is, and has been, impaired by the non-attendance and co-operation of many of its members ; and,

Whereas, This withdrawal of support and attendance is caused by certain action taken by this Association in August, 1885, relative to the report of the Sisters of Charity Hospital, which action has been construed by said members as a reflection on their honesty and veracity ; therefore, in accordance with these facts, be it

Resolved, That it is the sense of this Association that no such construction was intended by the resolution adopted August, 1885, and that it is to be deplored that such misapprehension exists, and should have existed so long.

The points in the case may be briefly summarized as follows : The Association, in adopting the recommendation of the committee requiring "accuracy and precision in the construction of hospital reports," confirmed the doubt which interested parties had raised, and cast a reflection on the honor and veracity of the medical and surgical staff; the Association has since suffered in usefulness and reputation in consequence of the non-attendance of these members of "questionable veracity;" that after three years have elapsed, and time has worn away the bitterness of these aspersions, the Association condescends to construe what it formerly called a falsehood into a misapprehension, and to regret that such an impression should have existed so long.

We conclude by affirming that, among gentlemen, an apology should follow an insult, and that the honesty of purpose and abilities of well-bred professional men should not be wasted in an endeavor to resuscitate an association which has been so heavily freighted with "envy, hatred and malice" among its members, as to place it beyond the recognition of honorable men.

A REVISED MEDICAL NOMENCLATURE.

Dr. J. W. S. Gouley has recently published a book, having for its objects: "First, to urge the official adoption of a stable basis of nomenclature and classification of the diseases of man; second, to place before the medical profession certain propositions directed to an improved classification of diseases; and, third, to awaken the attention of teachers to the necessity of ameliorating the nomenclature of medicine."

The profession will admit that great advantages would accrue from the adoption of a uniform system of nomenclature and classification, especially since vital statistics and the collective investigation of disease have of late years assumed so much importance. But that it is as yet possible to fix upon any stable basis of classification, we cannot believe, since pathology is still in an unsettled and speculative state. Many diseases are recognized only by symptoms, nothing of the anatomical changes being known, hence we cannot, as our author suggests, adopt an anatomical basis of nomenclature. The International Medical Congress might, however, adopt a uniform system of classification and nomenclature, subject to change in future years. For in all inductive sciences, hypotheses, theories, even systems and classifications must be purely arbitrary and subject to change with the discovery of each new truth. We believe, however, that there should be some censorial body to watch over the neologisms which are constantly being manufactured in our profession, a body like the French and Spanish academies, which might pass upon the accuracy and desirability of each newly

coined word. There can be no body better suited for this purpose than a committee of the International Medical Congress.

If the new words proposed by Dr. Gouley were submitted to such a censorial body, few of them would survive the critical dissection to which they would be subjected. For example, *hypocæmia* is suggested as a substitute for *anæmia*, a word which means without blood, instead of deficient blood. But no Greek would have violated the rules of orthography and euphony by forming such a word as *hypocæmia*. *Hyphæmia* is the word desired. Of thirty-four words chosen to designate morbid conditions of the blood, at least twenty are improperly formed, the laws of Greek orthography and euphony being in each case neglected.

The author also displays an unpardonable degree of carelessness in certain other words. *Nosonomy* is suggested as a word to designate the naming of diseases, a word which really means *the law of diseases*. *Nosonymy* is probably the word required.

Secondary affections are called *pathengenetic*, which our author informs us is derived from *ptithos*, disease, and *eggenes*, born from, *i. e.* *ek*, out, and *genes*, born. But the word *eggenes* occurs in classical Greek literature, and means born in, from *en*, in, and *genes*, born. *Pathexegenetic* is a word which would mean, *born from the disease*. We are favored with an etymology of *ptomaine*, from *ptoma*, a carcass, and *in* or *en*, within, opposed to *ek*, without; when the termination *ine* is a purely arbitrary ending adopted by chemists to designate alkaloids and extractives. *Ine* is really derived from Latin *inus*, and means belonging to. We learn that leucocyte is derived from *leukos*, white, and *kustis*, a bladder, instead of *kutos*, a cell. On the whole, we have not for many years seen the language of Hippocrates tortured so unmercifully both from an etymological and typographical point of view. So careless have the printers and proof-readers been, that a correctly accented Greek word is quite an exception. Dr. Gouley's experiments in etymology only serve to prove one of the conclusions of his work: "That the nomenclature of disease can be much improved only after a very great change for the better

shall be made in the fundamental science and associated arts of medicine," and, we might add, until more efficient classical scholars assume the task. Consequently, we will, for the present, continue to employ those old, "misused and improperly formed words," and will speak of *melancholy*, which has nothing to do with *black bile*; of *alopecia*, which has no relation to *foxes*, and of *arteritis*, which is not an inflammation of the *air tube*. But with the author's proposition to have the International Medical Congress adopt a uniform Latin nomenclature of disease, we heartily concur.

THE CINCINNATI MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

This seems to be the period of the renaissance of the American Medical Association, if we may judge by the record of its recent meeting in Cincinnati; there appeared to be an especial grouping of favorable conditions to make this one of the best of all the many good annual gatherings of this honorable and popular organization.

In the first place, the city chosen was a favorable one—central, easily accessible from all parts of the country, with ample hotel accommodations, and a commodious building admirably adapted to the uses of such a convention.

Then, in choosing Dr. Dawson as chairman of the committee of arrangements, the Association was wise, for it is doubtful if this onerous post was ever filled by a more faithful or competent man. The registration system was simply perfect, and all the many other details for the convenience and comfort of the members showed the hand of a master at the helm.

The social features of this meeting were exceptionally pleasant in character. The departure from the stereotyped plan of private receptions, and the substitution therefor of the informal receptions at the Burnet House and at the Art Museum, together with the musical treat afforded by the fine concert at Music Hall, were delightful variations, pleasing to both eye and ear. Cincinnati is rapidly taking position as the first American city in

music and art, and wisely afforded the visitors an opportunity to judge of her claims to this distinction.

If we turn to the scientific side of the convention, an equally favorable improvement may be noted. The chairmen of the sections this year delivered their addresses in their respective sub-divisions, where they properly belong, instead of in the general morning sessions, as heretofore.

The address on "General Medicine," by Dr. Roberts Bartholow, on Wednesday; that on "General Surgery," by Dr. E. M. Moore, on Thursday, and the one on "State Medicine," by Dr. H. P. Walcott, on Friday, all before the general morning sessions, were comprehensive, able, and instructive expositions of these several important departments of medical science.

The sections were, as a rule, well attended and the discussions unusually interesting, especially in the sections on surgery and obstetrics.

Dr. Senn's experiments with hydrogen gas in the diagnosis of intestinal wounds, were a contribution to the subject, of a high order of merit; and Thursday's discussion in the obstetric section on abdominal surgery was a scene well-nigh dramatic.

The practice, which has prevailed for the past three years, of the sections electing their respective chairmen, is to be commended as affording a better opportunity of selecting men for these important places who have done efficient work, than when the nominating committee performed this duty.

So long as the Association pursues the policy that prevailed in the meeting of 1888, of attending to its legitimate duties and avoiding acrimonious debates on codes and other mischievous petty questions, it will merit and receive the confidence and support of the better class of the profession; and, moreover, it need have no fear of opposition from any other organization, for its field is peculiarly its own, and it cannot be driven from it unless by its own suicidal acts.

IN electing Dr. Wm. H. Wathen, of Louisville, Ky., to be Chairman of the Section on Obstetrics and Diseases of Women,

and Dr. N. P. Dandridge, of Cincinnati, O., to be Chairman of the Section on Surgery and Anatomy, the American Medical Association has performed graceful acts of recognition to men who have been conspicuous for the scientific work they have accomplished in their respective sections. When a medical society brings such men to the front, it does itself honor.

Book Reviews.

The Language of Medicine. By F. R. CAMPBELL, A. M., M. D., Professor of Materia Medica and Therapeutics, Medical Department of Niagara University. New York: D. Appleton & Co. 1888.

This is a handsome octavo volume of 325 pages, and has for its object, as the author states in the preface, to provide the medical student with a suitable means of acquiring the vocabulary of his science. In Part I. the origin of the language of medicine is discussed, and includes a history of medicine from a linguistic point of view. The author shows himself thoroughly familiar with the principles of philology, and has succeeded in writing some chapters that will be of great value and interest to the educated physician as well as the novice. Each philological law is illustrated by examples of words in common use in our medical text-books.

In Part II. is found a discussion of the Latin element in the language of medicine. There are chapters on the proper pronunciation of medical words, and a list of 500 words commonly mispronounced, the correct and incorrect pronunciation being in each case indicated. In the composition of this portion of the work, the author evidently had in mind a little work which has attracted great attention among students, "3,000 Words Commonly Mispronounced." Physicians who are obliged to teach—and what medical man is not engaged in teaching?—will find these chapters of great interest. All will be surprised to learn how many words they have been continually mispro-

nouncing. Elementary instruction is given in those principles of Latin grammar which are of use in nomenclature and prescription writing. Vocabularies are given with the etymology and pronunciation of the words. There is also a chapter giving the grammatical construction of the prescription. In Part III. is found "The Greek Element in the Language of Medicine." The method of converting Greek words into Latin and English is described, and an alphabetical list of the stems of words designating the parts and functions of the body is given. In parallel columns with these stems are found the Greek words with derivations, and the Latin and English equivalents. Then, by means of prefixes and suffixes, the author builds up a host of Greek derivatives found in our medical books. There is also a chapter giving the principles of anatomical nomenclature.

In Part IV. are collected the foreign words adopted into medical terminology from the French, German, Italian, Spanish, etc. The whole work is carefully indexed.

We believe that this work supplies a real want in the profession. As Dr. M. B. Anderson, President of Rochester University, says: "The book will be of great interest even to physicians who have had a liberal education, and to the great mass of students ignorant of the classical languages, it will be found almost invaluable. The author's style has a terseness and perspicuity which render it a pleasure to read, while every page displays careful investigation and thorough scholarship."

Hysteria and Brain Tumors. By MARY PUTNAM JACOBI, M. D. Pp. 215; 8vo. G. P. Putnam Sons. 1888.

This book is composed of a number of essays which the distinguished authoress has prepared during the past few years, and they are well worthy of publication. The following are the subjects of the chapters:

- I. Some Considerations on Hysteria.
- II. Tumors of the Brain.

III. Note on the Special Liability to Loss of Nouns in Aphasia.

IV. Case of Nocturnal Rotary Spasm.

V. The Prophylaxis of Insanity.

VI. Antagonism between Medicine and between Medicines and Diseases.

VII. Hysterical Locomotor Ataxia.

The article on "Tumors of the Brain" is very timely, since much interest has recently been developed in the subject of cerebral surgery.

In the chapter on the "Prevention of Insanity," some new views regarding the etiology are advanced. She states that in minds predisposed to insanity there is often, if not always, a marked deficiency of elasticity. An impression sinks and remains, and the mind cannot disengage itself. Such minds should be educated up to the ability to change their occupation frequently.

The typographical work is, as is usual with the Putnams, of an excellent character.

A Compend of Human Physiology. By ARTHUR BRUBAKER, A. M., M. D., Demonstrator of Physiology in Jefferson Medical College, etc. Fourth edition; revised and enlarged. P. Blakiston & Co., Philadelphia, 1888.

The fact that a fourth edition of this work has been called for within three years of the publication of the first, indicates that it supplies a real want among medical students. It is a true compend, and contains nearly everything the student or practitioner is expected to know about the subject. Physicians will find this book an excellent means of acquainting themselves in a short time with the great advances made in this department of medical science within the past four years.



VOL. XXVII.

JULY, 1888.

No. 12.

Original Communications.

REMARKS ON PELVIC INFLAMMATIONS, AND THE MANAGEMENT OF THEIR RESIDUES.

By WILLIAM WARREN POTTER, M. D., Buffalo, N. Y.

The habit that formerly prevailed, sanctioned to a certain extent by custom, of characterizing almost any inflammation in the pelvis, without regard to its origin or involvement, as pelvic cellulitis, was misleading as well as incorrect, and it is, therefore, proper that it should give way to the term, pelvic inflammation, as being a more comprehensive and better expression every way. It would seem a good plan to group all inflammations of the pelvic structures under the general designation of pelvic inflammations, and to then differentiate them, if possible, according to their origin or location, when discussing the special diseases of the organs and tissues in severality.

The question of differentiation as to origin is one fraught with much difficulty, and is likely to remain undetermined as long as acute and conscientious observers hold conflicting views regarding the initial or primitive pathological conditions, found lying at the very threshold of the subject.

Perhaps the meaning I desire to convey will be better understood if I illustrate: One group, and a very large one, I may

add, with Dr. Emmet at its head, believes that the majority of these inflammations begin in the cellular tissue, and involve other organs and structures, if at all, by extension therefrom. Dr. Battey and his followers hold that the serious inflammations which are so destructive in their consequences, depend primarily upon disease of the ovaries, reaching other structures from that starting-point. Still another class of observers, whose numbers appear to be constantly increasing, in which Dr. Gill Wylie may be mentioned as a conspicuous leader, attribute these inflammations to diseased tubes as originating points of departure. I would not affirm that these distinguished men are engaged in acrimonious antagonism relative to the origin of pelvic inflammations, for, as a matter of fact, there is much common ground of agreement between them upon many points which the subject involves; nor would I wish to be understood to quote them as having pronounced a final dictum upon the point in question; but simply that this is, succinctly, the trend of their opinions thereupon at present, or up to the latest expression thereof that I have observed. Though purposely limiting my references in this illustration to gynecologists in this country, it may be remarked that these several views are supported by distinguished foreigners. I have no doubt all of them are correct; for, unless I have very much mistaken the order of sequence in the clinical phenomena that I myself have observed, there are inflammations that begin in the connective tissue surrounding the uterus, and are conveyed to other points by the blood-vessels or lymphatics, or have extended into them through continuity or contiguity; and, again, there are inflammations that originate in the ovary, either as a simple ovaritis or as cystic or cirrhotic disease, and have traveled both upwards and downwards in their course until there has been a general pelvic cellulitis or peritonitis, or both combined; and, yet again, that there are other inflammations which have started in the tubes themselves as a center, and have reached out into adjacent or contiguous structures, or have been carried hither and yon through the medium of the absorbents.

The question of the importance of pelvic inflammations I should like to say a word upon, since I have observed that it has been challenged in certain quarters, so far, at any rate, as "minor pelvic inflammations"—whatever that may mean—are concerned. Now, to my mind, no inflammation, whatsoever be its origin or limitation, should be looked upon as, in any sense, a "minor" malady, or one whose importance is likely to be "exaggerated," which has once invaded the female pelvis. It may be that their anatomical residues, as ascertained in the post-mortem room, appear somewhat trifling or unimportant in some instances. Perhaps, the complete clinical histories of these very cases, could they be known, would throw additional light upon the importance of the inflammations that left these traces or remnants behind. The debris along the shore does not always indicate, nor with great certainty, the real size of the wreck, much less surely the violence of the storm, which may have caused the disaster. I have been much interested in Dr. Coe's paper on this subject, (*N. Y. Medical Journal*, May 15, 1886,) and particularly in what he says bearing on the propriety of doing minor operations in the genital tract, when these inflammatory residues are found present. It is quite possible that, in certain cases, such operations have been done with impunity, or without resultant harm; but I have always been accustomed to regard the remnants of old inflammations in the light of danger signals, and I find it difficult to rid myself of such impressions.

Permit me to remark just here, that it is no part of my purpose to make this brief paper controversial, nor to do injustice to anyone. I am merely summoning a few of the witnesses for a re-examination, with a view, if possible, to arrive at the truth concerning some doubtful points, and to ascertain what can be done towards clearing them up.

Whatsoever the origin of these inflammations may be, the question of their clinical importance need not engage our attention very long; for I take it as a granted fact, that the various phenomena now generally grouped under the name of "pelvic inflammations," play an important part in the etiology of by far

the largest proportion of the disorders for which the gynecologist is consulted. It may be that they take their start in septic infection from gonorrhœa, traumatism, or parturition; or, on the other hand, their nidus may be the very pink of benignity itself; they may begin in the cellular tissue, in the peritoneum, or in the endometrium; as a vaginitis, metritis, salpingitis, or lymphangitis; it matters not when nor where nor how they start, they are inflammations pure and simple in their beginning, varying in degree of intensity and in resultant complications according to the constitution of the patient, virulence of the infection, benignity, or organ involved.

It is probable, as I have already hinted, that they sometimes begin in the pelvic connective tissue surrounding the uterus, at other times in the peritoneum, and at still others in the tubes themselves. They sometimes proceed promptly to resolution; again the masses of exudation will remain unaltered for months or years; yet again they go on to abscesses, and still yet again to other formidable and serious mischief, either in the site of their origin, or, by extension to other tissues and organs, ravage the pelvis to an extreme degree. In the septic varieties, the infection may be carried through the medium of the blood-vessels directly, or through the lymph-channels; but, come how they will and travel how they may, they are an ever-present, all-sufficient source of suffering and ill-health; and, moreover, often lead to important complications and sequilæ. In a certain number of cases, the inflammations will probably remain within a circumscribed limit, involving only the connective tissue adjacent to, or surrounding, the uterus in the sub-peritoneal pelvis. The exudate in these cases, under appropriate treatment, becomes absorbed, and very little or no permanent harm ensues. In others, however, the septic material is carried by the blood-vessels or lymphatics, or extends by continuity or contiguity, as the case may be, beyond the boundaries of the cellular tissue, the peritoneum is invaded, the uterine appendages becoming, perhaps, deeply involved in the inflammatory processes, and more serious mischief follows.

Thus it would appear that we are liable to meet with several varieties of pelvic inflammations, and, therefore, for the sake of convenience as well as for greater simplicity in description, I would suggest the following classification :

1. Simple pelvic inflammation. (Pelvic cellulitis.)
2. Compound pelvic inflammation. (Cellulo-peritonitis.)
3. Complicated pelvic inflammation.

In the first order, I would group all the simpler varieties of pelvic inflammation, that merely involve the circum-uterine connective tissue, not extending above the sub-peritoneal pelvis. The second could be made to embrace those inflammations that reach into and include the pelvic peritoneum in their progress, more formidable than the first, and are of a cellulo-peritoneal character. The third proposed classification would naturally infold those forms that involve the appendages, such as depend upon the specific infection, and those that end in pus formations or have other grave terminations. This arrangement of the subject would enable us to avoid the use of those objectional and misleading terms, *peri-* and *parametritis*.

Dr. Emmet has taught us more about the importance of pelvic cellulitis,—the necessity of its early recognition, its relations to other diseases of the sexual organs, and its appropriate treatment,—than any other observer; and the profession can never fail to give him the first place in its affectionate regard for the thoroughness, clearness, and force, in which he has insisted upon the necessity of heeding the lessons that he has taught. They are stamped with ineffaceable colorings upon the whole system of modern gynecology. But, in view of the continual enlargement of the field of knowledge generally, and particularly since tubal pathology has become better understood, it is probable that these earlier lessons have outgrown their original proportions and significance; certainly they are reaching out in a wider scope to-day than the great master could himself have foreseen when he first announced his doctrine of pelvic cellular pathology.

Around the modern doctrines of tubal disease, which have chiefly come into vogue within a decade, are gathering a large

number of younger gynecologists who are rather loth to adopt any views of pathology that seem to counterpoise the theory of the origin of these inflammations elsewhere than in the appendages; while the older observers in this field are equally slow, as a rule, to yield ground that experience would seem to strongly fortify. It must be confessed that these newer views have served to embarrass the defense of the former positions held by the profession on many points connected with the pathology of pelvic disease, and a recasting of the lines may become necessary before a true solution is reached. Be that as it may, the real object of all scientific research in medicine is to establish facts, and these without regard to the theory of any man, or coterie, or any priority of discovery, or the particular claims of anybody to any operation, method, or special mode of treatment whatever. These are only interlocutory questions that chiefly concern the historian.

The medical axiom that proper treatment must, of necessity, be based upon accurate diagnosis; and its corollary, that diagnosis must, in turn, rest upon correct pathological knowledge, is as applicable here as elsewhere. Nevertheless, owing in part to the difficulties surrounding their investigation, and in part to the disguises in which the disease frequently masquerades, it is not always possible to mark the diagnostic line sharply between a cellulitis and peritonitis, nor between an ovaritis and a salpingitis; especially so when these several conditions blend and intermingle in their progress, as not seldom happens. How many operators are able to satisfy even themselves in advance as to what will be found when they open the abdomen? Even Mr. Tait, if we do not entirely misapprehend him, boldly asserts that when in grave doubt about the diagnosis, and the symptoms are of a serious or threatening nature, he lays open the abdomen to settle the matter.

This is a cavity full of surprises—a *cavum consternatum*, so to speak—and he is often the most surprised whose diagnosis is varified by laparotomy. Those most experienced in the operation are often slowest to announce a positive diagnosis, hence it is getting to be considered nigh unto an index of skill to give,

before section, a conservative opinion as to the anatomical characters of the abdominal and pelvic contents.

These inflammations begin in so many different ways, that it is not strange they become shrouded in considerable mystery in their advanced stages, or after they have passed beyond the confines of the structures originally involved. Thus it becomes more difficult to diagnosticate differentially, when unfamiliar with their inception and early progress. Let me illustrate, or apply, my meaning by what a lawyer would term a hypothetical case: Suppose an inflammation of the pelvic connective tissue to begin, for instance, in its parietal layers along the uterus, thence invading the loose areolar tissue around the vagina and cervix, finally extending to the broad ligaments, and the sheaths of the blood-vessels and lymphatics. The peritoneum now becomes involved, a pseudo-membrane is formed which, by its contraction, displaces the pelvic organs, consolidates and binds them together, matting uterus and appendages together into a tumor-like mass. Suppose, further, that such a case, after the lapse of time and the exhaustion of patience in vainly hoping for recovery, finally seeks the advice of the gynecologist, who finds himself suddenly called upon to decide its nature and the methods to be adopted for its cure. Would not his task be much simplified, and his judgment greatly aided, by a previous knowledge of the case from the inception of the inflammation to its termination? And this brings me to remark, that the gynecologist rarely sees these inflammations in their first forms. They usually appear as acute or subacute inflammations, finally becoming chronic; the acute and subacute forms generally fall to the care of the family physician, so the gynecologists, seeing them chiefly in their chronic conditions, deals mainly with their remnants or residues.

If the initial inflammations appear in a variety of forms and progress through many avenues, what shall be said of the multifarious aspects that their remnants present? If the former are perplexing in their behavior, the latter are treacherous, hidden, even deceptive, and their name is almost legion. They are man-

ifested in altered functions, changed structure, and perverted sensation in all the organs and tissues of the region invaded, and are a constant menace to the comfort, safety and fruitfulness, not to say physiological perfection, of women so afflicted. They spring chiefly from three sources: 1st, abortion and parturition; 2d, traumatism; and 3d, infection.

The list of these remnants that may be the result, directly or indirectly, of parturition alone is a long one; but I will not take time to even enumerate them now. I merely wish to speak of one or two varieties. It is well known that in exudative celluloperitonitis, masses of the exudate frequently become encapsulated and remain unchanged for a long time; finally, something happens to light up the inflammation anew, and changes then take place in a variety of ways. The commonest are: (1) resolution and absorption of the exudation; (2) pus may form and the abscesses open into the rectum, vagina—rarely into the bladder—and occasionally into the peritoneal cavity. I have lately seen an example of each of these modes of termination of residues after parturition. In one, several months after labor, a large tumor-like mass was found in the retro-uterine space, which, though quite firm and hard, was believed to contain pus. An exploratory puncture proved this suspicion correct, a free incision and drainage through the vagina were employed, and the case went rapidly onward to recovery. In another case, the mass was somewhat boggy, quite large, caused impaction of the pelvic viscera, and numerous reflexes—stomachal and psychical. Absorption finally took place, and this patient made a good recovery. These cases both, but especially the latter, resembled retro-uterine fibromata, and had been mistaken for tumors of that sort—a not unlikely error in this kind of inflammation residues.

Other important remnants or residues of pelvic inflammations are: Cicatrices and hypertrophic enlargements of the cervix, due to lacerations; fixation of the womb, with or without displacements; subinvolution; matting together of uterus, tubes and ovaries by pseudo-membranes; cystic, cirrhotic, hemorrhagic, and pyogenic ovaries; pyo- hydro- or hematosalpinx, resultant

from catarrhal or gonorrheal salpingitis; and cicatrices of the uterine supports.

The influence of the residues of pelvic inflammations upon the health of women who chance to possess them, varies in degree and importance according to age, constitution, resisting power, and extent and character of the invasion; ranging all the way from slight or no disturbance whatever, to severe and even dangerous manifestations of the gravest organic disease. Again, they may cause very little inconvenience, at first; but, secondarily, as time advances and complications arise, may occasion the most serious threatenings to life. Recurrent inflammatory attacks may be noted as especially taxing to the stamina of the female. After an apparent recovery and everything promises ultimate sound health, the attack breaks out again, perhaps on the other side, going through all its phases, and finally stranding the patient on the shoals of sterility, or chronic invalidism. Frequently, too, the remote or sympathetic disturbances to the economy which these residues provoke, are less endurable than the primary disease. The rectum, bladder, and stomach are particularly liable to functional disorders of a distressing and misleading nature. Digestive ailments and skin diseases are now and then attributable to these residues. Finally, reflex and sympathetic neuroses, and psychic disturbances, are often a distressing and obstinate accompaniment, ranging all the way along the line from mild hysteria to absolute insanity.

The list might be further extended, as well as elaborated in greater detail, but enough has been said on this point to, at least, emphasize the importance of early recognition and prompt attention to even the lesser products of these inflammations.

MANAGEMENT OF INFLAMMATORY RESIDUES.

The management of pelvic inflammations naturally divides itself into that for the acute or immediate stage, and that for the chronic or remote form—the latter embracing the treatment of the residues or remnants of the inflammatory processes. The

therapy of acute inflammations is not considered as within the scope of this paper; nevertheless, it may be remarked that it is important to prevent or modify the attacks, as far as possible, by the thorough use of antiseptics during labor or after delivery. Without going into this subject in detail, it may be laid down as essential that the hands of the accoucheur should be absolutely sterilized to begin with; that in instrumental labors, or in any case where it has been necessary to invade the uterus either with hands or instruments to effect delivery, the womb should be irrigated with an antiseptic liquid that is an undoubted germicide; and that this process should be repeated in any such case where the temperature rises above 100 F., with a tendency to steadily increase, sufficiently often to keep it free from sepsis. Under proper antiseptic precautions in midwifery, pelvic inflammations will often be prevented, or their ravages diminished.

When a woman does not effect a "good getting up" after delivery, and she complains of deep-seated pelvic pains, especially if associated with a slight rise in temperature which continues for days or weeks, the suspicion is very strong that there are exudations lurking somewhere in the pelvic cavity, for which a careful search should be made. If they should be discovered, appropriate treatment, with a view to promote their absorption, should be instituted at once. In such cases, I have usually obtained benefit from a careful tamponnement of the vagina, medicating the tampons according to the nature of the case. This furnishes support, rest to the parts, and elastic pressure, all of which greatly facilitate absorption of the exudate, and tend to relieve pain. It is a valuable adjunct in the management of all the residues of pelvic inflammations in the preparatory or initial stage of treatment, and sometimes seems to effect a complete cure, rendering the appeal to more radical measures unnecessary.

In a paper read before the Medical Society of the State of New York, a few years ago, I advocated the use of the vaginal multiple tampon in the treatment of uterine and ovarian displacements. The tampons, at that time, were made of cotton, generally medicated in some way, and always

disinfected. In these pelvic inflammations, I prefer wool, as furnishing equally good support, and much better elastic pressure, which is a point of great importance. Finely carded lamb's wool is soft and unirritating, and is much more useful in these cases than the ordinary cotton tampon. The principle of elevating the uterus and its appendages out of the lower pelvis, releasing them to a considerable extent from impaction, and thereby promoting nutritive changes, is undoubtedly a correct one; but its usefulness is restricted within certain limitations. Its contra-indications appear to be fever, sub-acute or chronic peritonitis, strong adhesions, and abscesses. Its use should never be persisted in when it causes pain, but when it affords relief, its employment is pretty certain to be followed by good results. In doubtful cases, it would be well to proceed cautiously at first, until its efficacy is tested, after which, if favorably indicated, we may go ahead with confidence.

Under the stimulus of the elastic pressure of the wool tampon, and the support it affords, the exudates that have been thrown out during the acute inflammation, and which render the tissues sodden and boggy, are frequently absorbed, the circulation in the blood-vessels and lymphatics becoming freer, and the nutrition, as a consequence, becomes improved. Even in fixation of the womb by adhesions, when the latter are not too strong, it is possible to loosen the organ, free it from its moorings, and restore it to, at least, an approximative normal position through this method of support and pressure. In subinvolution, too, the essential shrinkage of the uterus can often be promoted by this means.

The residues due to laceration of the cervix or other portions of the utero-vaginal tract usually require surgical measures for their cure. It appears, to the writer, that one of the important benefits of trachelorrhaphy, among its many others, is found in its prevention of, or the relief it affords from, those secondary conditions liable to follow in the train of an unrepaired cervical rent—either tissue changes, reflex neuroses, or an extension of the inflammatory products into other organs or tissues. Hence, in

making the operation, it is expedient to excise all cicatricial tissue and hypertrophic thickening of the everted cervix.

In displaced uteri, caused by inflammatory remnants, a reasonable effort to free the organs from their moorings, and restore them to their proper positions, may be made, but I need scarcely remark that it should not be attempted with the uterine sound or other intra-uterine redresser. The sound has little or no place in the management of these cases, either for purposes of diagnosis or treatment; indeed, it may be confidently asserted that it is a fruitful source of mischief, liable to rekindle a latent inflammation, and to even provoke new complications. Pessaries, too, are of no avail, and may do positive harm, if resorted to before the uterus is made to move freely in the pelvic cavity. If this mobility can be re-established through any agency free from harm or danger, then a suitable pessary may prove serviceable.

The formation of pus in the pelvic cavity is not an infrequent ending to either acute or chronic inflammation, and, when established, furnishes an interesting field for the surgeon. When large abscesses form as the result of acute inflammations, it is not difficult to decide upon the proper course to pursue; but such is not always the case when old residues finally break down into pus sacs. In the former, the symptoms are urgent, something must be done, and that quickly, or disaster may result. Moreover, the location of the abscess is not, as a general rule, difficult to define, nor the pus itself out of easy reach. Not so, however, in the so-called chronic abscesses, especially where the pus centers are small, as they frequently are when they originate in the hardened masses of exudation—generally remote from the surface—and, perhaps, surrounded by thickened walls, or further obscured by overlying structures. These conditions not only increase the difficulties of diagnosis, but the abscess is not as easily evacuated. It may be justifiable in doubtful cases, but where yet there is a strong suspicion of pus, to clear up the doubt by exploratory puncture; if pus is thereby revealed, the opening can be enlarged by divulsion with a steel dilator, the contents evacuated, the cavity antiseptically irrigated, and a drainage tube inserted. Care must, of

course, be taken in the exploratory puncture, that the instrument penetrates deeply enough to reach through the thick abscess-wall, else there is liability to deception. The case is further complicated if there prove to be several small pus centers, instead of one, as is usual; but the rule applies to evacuate them all, if possible. If, under incision and drainage, the cavity does not close promptly, or if it secretes unhealthy pus, it should be washed out frequently with antiseptic solutions; or it may be packed with iodoform gauze. Finally, if it remain latent very long, and its pyogenic surface is converted into cicatricial membrane, the curette may be demanded before a cure is effected.

It may be stated, as a principle, that pus is here, as elsewhere in the body, an enemy for which diligent search should be made, unleashed when found, and the case further treated in accordance with the modern surgical rules applicable. It may be that the abscess can best be treated through the vagina, and the opening and drainage conducted through its walls. This will, most likely, be the case in low-down pus collections; but if it is impossible, or even very difficult, to reach the abscess through this route, then it may best be treated by abdominal section and drainage, and the careful stitching of the abscess walls to the margins of the incision. This class of inflammatory residues often tax the skill, patience, and resources of the gynecological surgeon as much as any pelvic disease, and it is one of the creditable achievements of his art that so much has been accomplished for their relief.

In the matting together of uterus, tubes, ovaries, and, possibly, intestines, by old inflammatory adhesions, very little can be done except through surgery. When abdominal section discloses these dire conditions, it may become a question sometimes whether the appendages shall be removed entire, or whether the adhesions shall only be broken up, according to the method of Dr. Wm. M. Polk, and the organs left in the hope that, though their functions may not be restored, the symptoms may be relieved. This latter method avoids that mutilation which so many dread, and may, in exceptional cases, serve as a valuable expedient.

Though the management of many other inflammatory products might be profitably discussed, I shall content myself, at this time, with but brief reference to one other class only, viz.: the residues resultant from salpingitis known as pyo- hydro- and hematosalpinx. This is a field of much interest, much debate, and much contest withal—one fraught with much difficulty, and one where there are yet many opinions and many methods. It is safe to say that more literature has appeared upon this subject and those akin to it within the last few years, than upon any other branch in gynecology—and the end is not yet. It is probable that a salpingitis may originate by extension from either the uterus or ovary, that it may begin as a catarrhal or a gonorrhœal inflammation, and that it may leave as residues either a dropsy of the tube or pyosalpinx, according to various surrounding and limiting circumstances. It is not always possible to differentiate these two conditions. The necessary bimanual manipulation to effect such diagnosis, involves the possible danger of rupture of the tube-wall, hence must be conducted with great care. These tube-sacs sometimes empty spontaneously through the uterus and out, in which event the diagnosis is no longer in perplexing doubt. The management, however, will not, up to this time, differ materially in either case. If the accumulations are small, we may seek to promote either their absorption or their exit through the uterus, by support and gentle elastic pressure through the agency of the wool tampon, by local resorbents, and by various constitutional means. If there are few and weak adhesions, and a coincidence of many other favorable circumstances, there is reasonable hope of accomplishing one or other of these terminations; the first in strong constitutions with good resisting powers; the second in feebler patients, where the uterine end of the tube is not too firmly sealed.

In the larger accumulations which threaten life, or greatly impair health, or even cause great bodily suffering, relief must come through surgical means. The danger of rupture or slow perforation of the sac is an ever-present one, to which due weight should be given in determining operative interference. In

some cases, it may be advisable to resort to puncture of the tube-sac through the vagina. This method is available in small cyst-like tumors that are within easy reach. These sometimes remain unfilled after a single puncture, and the case proceeds to recovery. In other instances, repeated puncture becomes necessary, unless drainage is provided and antiseptic irrigations employed.

The question of removal of the appendages by abdominal section for various conditions that may be classed as inflammatory remnants, brings us into a field of great importance, and where, notwithstanding all that has been written and said of late, there is still room for much discussion. That the operation is a justifiable procedure in certain junctures—that it has a field—cannot be gainsaid. The principal and all-important question is to decide its applicability to each particular case. Are there no other means of cure? Shall the operation be done now, or shall there be further delay? These points are often thrust at the gynecological surgeon for decision, after other difficult problems have been disposed of and the way finally cleared for a judgment upon them. It is not here that a mere knowledge of the technique of the operation will avail, nor the courage to do it; but that rare combination of tact and skill which can only be found in a matured surgical judgment, is required for the exigency. Dr. Parvin, in a recent review (*American Journal of Medical Sciences*, February, 1888, p. 155), says: "A pressing question of the hour is, When is pelvic peritonitis a mere consequence usually of disease of tubes or ovaries, to be treated medically, and when is extirpation of the uterine appendages necessary? The latter question is not to be determined by the experience of one individual, no matter how great that is, but by that of numerous members of the profession, who shall wisely observe and carefully record not only immediate, but remote, results from the removal of the uterine appendages."

That the operation has been done when it ought not to have been done, is probably true. I have no doubt it is equally true that it has been left undone when it ought to have been done.

There are yet many opinions and many methods concerning the earlier conduct of these cases; but, given a tube distended with pus, no matter what its origin, if, after a reasonable trial of minor measures, it still renders existence miserable, torturing the patient and jeopardizing her life, there is, I affirm, no rational mode of relief excepting through the avenue of excision. I would not make haste to extirpate every swollen tube; I would exhaust other means first, and then, if need be, cut them out to save life or relieve grievous bodily suffering.

With the abdomen once open, various other questions are presented that must be decided, and that quickly. Shall the tube-sac be simply punctured and only the contents withdrawn? Shall the tube and ovary on one side only be removed? Shall the appendages on both sides be extirpated? Shall adhesions be broken up and the organs left? The operation may be complicated with other and new-found conditions, such as fibromata, metric, parametric, and peritoneal residues, cancerous and tubercular diseases, etc. If removal of a tube becomes impossible by reason of many and strong adhesions or friability of the tissues, we may then content ourselves with incision of the sac, sewing its edges to the abdominal wound, and drainage; or the abdominal opening may be sutured, and drainage through the vagina employed, according to Martin.

If the disease is wholly confined to one side, the other tube and ovary being perfectly healthy, then extirpation may be limited to the diseased side. Great circumspection will often be required to determine this question, as it frequently becomes a cause of regret, if subsequent mischief arises in the organs left behind, that they were not included in the first operation. It has been urged that the appendages should be saved on one side, unless there be very marked evidences of disease, lest the woman be sterilized by the operation. It is a burning question with me whether a woman who has had sufficient pelvic disease to warrant the unilateral extirpation of the appendages, should ever again be subjected to the dangers of pregnancy and parturition. In cases of doubt, I should lean to the side of total extirpation.

The decision might, with propriety, be left with the parties in greatest interest in each case, upon a full explanation beforehand.

It does not come within the province of this paper to treat upon the technique of the operation.

Many other details concerning the management of the residues of pelvic inflammations merit careful consideration, but this paper has already reached the limits which are proper in this paper.

In the foregoing, I have sought to underscore the following points, viz. :

1. The importance of early attention to even the *soi-disant* minor pelvic inflammations.
2. The suggestion of a simpler classification of pelvic inflammations.
3. The influence inflammatory remnants exert upon the health of women.
4. The great value, *inter alia*, of support and pressure in their management.
5. The thorough trial of all intermediate therapeusis before,
6. The final resort to surgical relief by abdominal section.

284 FRANKLIN STREET, June, 1888.

THE ELECTRO-MAGNET IN REMOVAL OF STEEL FROM THE INTERIOR OF THE EYE. *

By ALVIN A. HUBBELL, M. D.,

Professor of Diseases of the Eye, Ear and Throat, in the Medical Department of Niagara University,
Buffalo, N. Y.

One of the most serious accidents that can befall the eye is the introduction of a foreign body into its interior. In some cases vision is at once destroyed, while in nearly all, inflammatory action rapidly develops, and if any sight were previously left, it soon becomes lost by this process. Such injuries are, moreover, extremely liable to cause sympathetic disease of the other eye, and thus lead to total blindness. Exceptional cases have been recorded, in which the presence of a foreign body in the eye has been tolerated for weeks, months, and even years,

* Read before the Western Branch of the New York State Medical Association, May 9, 1888.

without suffering, and sometimes with more or less preservation of vision ; but these are so rare as practically to have no weight against the rule that the foreign body must be removed or the eye will be lost.

The kinds of foreign bodies which are driven into the eye are various, according to the occupation and circumstances, and they may lodge at almost any point. They may also produce any extent of injury, from one scarcely discernible to one causing a total destruction of the eye. Under all circumstances, their removal is most desirable, and even imperative, so far as the preservation of vision is concerned ; yet, to attempt this, involves one of the most uncertain and difficult procedures in surgery. All sorts of forceps, hooks, curettes, scoops, etc., have been devised for the purpose, and when the foreign body is situated in the anterior part of the eye, where it can be seen by the operator, some of them may be used with occasional success. But when it is lodged in the vitreous cavity or posterior part of the ball, the difficulties are increased many-fold, and it is often necessary to remove the whole eye in order to avert sympathetic disease of the other eye and save the patient from hopeless blindness. This is especially true when any substance except steel or iron enters the eye. When, however, it is the latter, the chances for removal and recovery are greatly increased by the use of the permanent or electro-magnet.

Every one knows that the magnet has the power of attracting iron and steel ; and it is the practical application of this principle that enables the operator of the present time to save many eyes that, treated by the old methods, would be lost.

The permanent magnet was suggested for the removal of steel from the eye many years ago.* But the credit of starting the impetus which has led to its more general use is due to Dr. W. A. McKeown,† of Belfast, Ireland, who, in 1874, recorded several cases which he had successfully treated. Various forms of the permanent magnet have been devised, but one of the best is that

* It was suggested by Fabricius Hildanus, "*Opera Observationum et Curationum*," 1646 ; by Milhes, "*Observations of Medicine and Surgery*," 1745 ; by Morgagni, "*De Sedibus et Causis Morborum*," 1779 ; by Meyer, "*Medic. Leitung vom Verein für Heilkunde in Preussen*," No. 2, 1842 ; by Himley, "*Die Krankheiten und Missbildungen des menschlichen Auges und deren Heilung*," 1843 ; by White-Cooper, London "*Lancet*," 1859 ; and by VonRothmund, in 1873, "*Centralblatt für Augenheilkunde*," 1880.

† "*British Medical Journal*," 1874.

of Dr. Greuning, of New York. This consists of several small cylinders joined together and armed at one extremity with a needle or point suitable for introduction into the eye.

The electro-magnet was first used by Hirschberg,* of Berlin, in 1875. His first instrument was of rude construction; but in 1877 a more perfect one was manufactured for him, which he fully described in 1881.

The electro-magnet, as used for extracting steel from the eye, consists essentially of a cylindrical core or nucleus of pure, soft iron, wound with several convolutions of insulated copper wire, which is connected with a galvanic cell or battery, and transmits the electric current for magnetizing the core. From one or both ends of the core are extended the points or needles to be introduced into the eye.

Several modifications of the electro-magnet have been presented to the profession, but the most important are those of Hirschberg, of Berlin; McHardy, of London; Snell, of Sheffield, and Bradford, of Boston. Hirschberg's seems to be the most bulky and clumsy, and McHardy's the lightest.

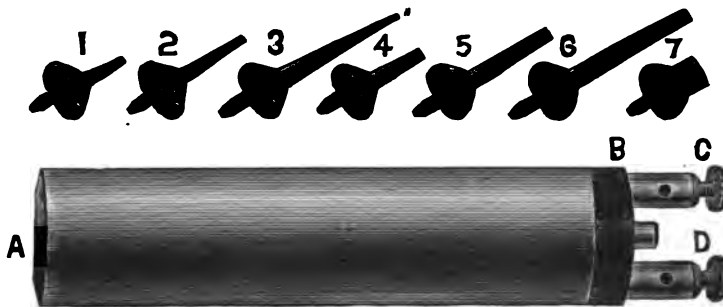


Fig. 1.

THE HUBBELL-PLUMB ELECTRO-MAGNET, ACTUAL SIZE. †

To this list I desire now to add another which had its origin at a time of emergency, and, as it appears to me, possesses sufficient merit to warrant me in calling the attention of the profession to it. It is shown in actual size in the accompanying cut, fig. 1

* "Archives of Ophthalmology," Vol. X., 1881.

† For sale by Charles Plumb, Electrician, Buffalo, N. Y.

Its length, A to B, exclusive of the connecting-posts, is three and one-eighth inches (3.9 centimetres), and its diameter is a little less than three-fourths of an inch (17 millimetres). Its weight is three and one-fourth ounces. Its construction is somewhat different from that of other electro-magnets, inasmuch as the core is not solid iron, but consists of small, soft iron wires twisted together and around a larger central wire of sufficient size to receive the extensions or needles which are screwed into it at A. Furthermore, the coil is not one continuous wire, but consists of four wires, each running from the connecting-post, C, to the extremity, A, and back to the other connecting-post, D. This coil is supported at each end by the hard rubber caps, A and B, and is covered by a light, nickel-plated, brass jacket. The cap, A, is rounded, and the core at this extremity is tapped to receive the needles. These needles, of different sizes and lengths, are made of soft iron, and those shown in the cut are straight, but the smaller ones may be easily curved to suit any case. The extremity, B, receives the posts by which the magnet is connected with a battery, a quart, bichromate, single cell, being preferable. When the electric current from such a cell passes through the coil of this magnet, its attractive power is very great. The amount of iron which it suspends varies, however, with the length and size of the extension or needle used. The longer and smaller the latter, the less will it suspend. With the extension 7, fig. 1, it will raise and hold *thirty-one* ounces of iron; with one one-half of an inch long, measuring from the face of the instrument, and five thirty-seconds of an inch in diameter at its point, *twenty-eight* ounces; with one the same length, and point four thirty-seconds of an inch, *twenty-four* ounces; with one the same length, and point three thirty-seconds of an inch, *eighteen* ounces. I believe these measurements of power are far in excess of Bradford's magnet, which is often referred to as the strongest of the kind made. His magnet with extensions one-half inch long and five thirty-seconds, four thirty-seconds, and three thirty-seconds of an inch in diameter at their points, suspend, respectively, twenty, sixteen, and eleven ounces. This seems to be a great contrast of power in favor of the Hubbell-Plumb instrument.

The advantages claimed for this magnet are : its great power of attraction, its lightness, its small size, and its shape, most convenient for manipulation. These combined qualities make it a most valuable and desirable instrument, if not the best manufactured. Whatever merits, however, this magnet may possess, I cheerfully accord to its maker, Mr. Charles Plumb, of this city, a practical and scientific electrician. I simply suggested to him the principle upon which it should be constructed.

The diagnosis of steel in the eye is not always easy. In the majority of cases, the patient will state that something has struck his eye, but it will often be difficult to persuade him that anything has entered it. Only the most careful examination with the ophthalmoscope, oblique illumination, etc., together with a consideration of the circumstances of the injury, will enable the surgeon to arrive at a satisfactory conclusion. Even then it is often impossible to make a correct diagnosis, on account of hemorrhage into the eye, mutilation of the parts, etc. In such cases, it has been suggested to apply the face or a large extension of the electro-magnet to the surface of the ball. If steel is in the eye, it is claimed that it will be attracted toward the magnet, and its movement will cause pain. While this is not altogether certain, it may be well to resort to this test in doubtful cases.

When it becomes probable or certain that steel is in the eye, the electro-magnet, for purposes of extraction, can be relied upon with much confidence. The manner of using it, and the kind of extension to be selected, whether straight or curved, long or short, large or small, depends upon the nature of the case and whether or not the steel has been seen and localized. In general, the needle of the magnet may be introduced through the original wound of the injury, or, if some time has elapsed since the accident, or for other reason, through an incision by the operator in nearer proximity to the steel. When a new opening is made, it is usually done through the sclerotic, between two of the recti muscles, avoiding, if possible, the ciliary body. Before making the incision, however, it is sometimes advisable to expose the sclerotic at this point, by making a conjunctival flap, or,

excising a piece of conjunctiva, and stopping all hemorrhage with hot water. Whether the magnet-needle be introduced through the injury-wound or the surgeon's incision, it should be cautiously directed toward the supposed locality of the steel, care being taken not to add further injury to the lens or other internal structures. If the steel is attracted to the magnet-needle, it often strikes the latter with a distinct click, which is both felt and heard, and is firmly held by it and withdrawn, unless the opening be too small, when it should be enlarged. After its removal, the conjunctival flap is replaced, or, if excised, the conjunctival wound is closed with fine sutures.

For this operation, the patient should be etherized. The magnet should also be previously tested to be certain that it is in good working order. The current of electricity should not be passed through it for too long a time, as it will, after a while, become heated. It can, however, be run for ten or fifteen minutes without being heated too much.

The results of treatment of steel in the eye with a good electro-magnet are gratifying in the extreme. It is not to be expected, however, that every eye will be saved by it, for the injury is frequently such that the eye is hopelessly lost from the beginning. But the success is so much greater than before it came into use, that the instrument marks an epoch in the therapeutics of this class of injuries.

The following cases have come under my observation :

CASE I.—Michael Sullivan, aged forty-three, machinist. His left eye was struck with a piece of steel, June 18, 1884. He says the sight was destroyed at once. He was attended by another surgeon in this city, who enucleated the ball

On the morning of the 27th of the following August, two months after the accident to the left eye, while striking a "sett," a chip of steel flew into the right eye. It caused very little pain, the eye "watered" some, and vision was "pretty good." He at once sought advice, and was told that the steel could be seen in the back part of the eye. He entered St. Francis' hospital, and on the following day, the 28th, while anæsthetized, an

unsuccessful attempt was made to remove the steel through the wound which the latter had made. I have been informed that an electro-magnet was used. The doctor, failing to extract the steel, and declining to make or allow any further efforts at its extraction, was discharged, and the patient was placed in my hands on the evening of August 30th, eighty hours after the accident.

The eye, at this time, was in constant pain, with a "pricking" sensation in its upper part, and vision was reduced to counting fingers at two feet. There was considerable lachrymation, the eyelids were somewhat swelled, the eyeball was very red, and the lower conjunctiva was chemotic. There was a wound at the junction of the lower part of the cornea and sclerotic two or three mm. long. This was still open with a bead of vitreous pressing through it. The pupil was not round, a piece of iris having probably protruded through the wound and been cut off. On using the ophthalmoscope, the fundus was found to be greatly obscured by either hemorrhage or inflammatory products, or by both. The steel could not be seen; I had the assurance, however, that it was in the vitreous, and it was evident that it had entered at the lower corneo-scleral junction, through the iris and suspensory ligament of the lens, and without wounding the lens, as this was perfectly transparent.

It was apparent that the steel must soon be extracted, or the eye would be lost and the patient blind. This, it seemed to me, might be done with the needle of a good electro-magnet introduced directly into the vitreous, through an incision of the sclerotic near the equator of the ball. The first thing needful, however, was an electro-magnet, and this I did not possess, and I did not know where I could at once obtain one. I, therefore, applied for aid to my friend, Mr. Charles Plumb, of this city. I told him what I wanted, and suggested the principle upon which an instrument should be made. He at once set his "genius" to work, and by ten A. M. the next day, he had one ready, of which the one above depicted is only a more finished copy.

At eleven A. M., August 31, just four days after the injury, I proceeded with my proposed operation. I was assisted by Drs. Tremaine, Lothrop, Mickle, and Montgomery, and by Mr. Plumb, who had charge of the magnet. After the patient was anæsthetized, I dissected a triangular flap of conjunctiva from the sclerotic at the external and lower part of the ball. The hemorrhage was checked with pieces of ice. I then made an incision with a cataract knife through the exposed sclerotic into the vitreous. This incision, about one sixth of an inch long, was directed antero-posteriorly between the external and inferior recti muscles and just in front of the equator of the eye. A few drops of yellowish fluid escaped through the incision. Mr. Plumb having the magnet in readiness, I introduced its needle, about half an inch long, into the vitreous cavity towards its center. Not feeling anything, I then directed its point toward the front of the eye, when I felt a click, which was distinctly heard both by myself and the bystanders. On withdrawing the needle, the steel came with it, firmly held in its magnetic grasp. It was a thin scale, and is shown in actual size in Fig. 2. The conjunctival flap was replaced and stitched at its apex, when it nicely covered and protected the sclerotic wound.



Fig. 2.

Very little reaction followed the operation, and both the original and new wounds healed kindly. Improvement began to take place immediately. After several months, the opacities of the vitreous had cleared away, and the patient was able to read the finest print slowly. The field of vision was left somewhat contracted, and the ophthalmoscope showed some marked choroidal changes. But the vision is still serviceable. The patient reads a great deal, and is enabled to earn an independent livelihood.

CASE II.—April 5, 1888, I was invited by Dr. F. W. Abbott, of this city, to examine an interesting case, which he has kindly permitted me to refer to in this paper. On April 3, 1888, Miss

Argus, about twenty years of age, was stitching leather with a sewing-machine, when the needle broke and a piece struck her right eye. She applied to Dr. Abbott for advice, not, however, suffering much distress or pain. On examination, there was scarcely any evidence of injury, except the anterior chamber was obscured with blood. A solution of atropia was ordered instilled, and she was asked to return in two days. At this time, I was invited to see the case. The blood had become absorbed, and the pupil was nearly at its maximum dilatation, thus permitting an easy examination of the fundus. The ophthalmoscope showed all the media to be transparent, and a piece of the sewing-machine needle could be distinctly seen in the vitreous, projecting from the anterior and inner part of the cavity directly toward its center. A slight mark could be distinguished externally at the inner corneo-scleral junction, indicating the point of its entrance. It had evidently passed through the iris, and nearly through the ciliary body, by which it was now firmly held. The eye was slightly red and irritable.



Fig. 3.

Arrangements were made for an operation on April 6th, at which I assisted with my magnet. The patient being anesthetized, the doctor excised a piece of conjunctiva immediately posterior to the point of entrance of the needle and over the inner ciliary region. The hemorrhage was stopped, first using pieces of ice, but afterwards cotton steeped in hot water, which was much more effective. He then made an atero-posterior incision directly through the sclerotic and ciliary body into the vitreous cavity, about one-sixth of an inch long. The magnet being in readiness, I introduced a small extension through the incision, and it at once grasped the broken needle, but without any click, and without loosening it. I held it steadily with the magnet while the doctor enlarged the incision anteriorly until it was entirely disentangled, when it was easily withdrawn, adhering to the magnet. Fig. 3 shows the size of the piece of needle extracted.

The conjunctival wound was closed by two sutures passed perpendicularly to the sclerotic incision. The patient was kept quietly in bed a few days, with the eye bandaged, and atropia was occasionally instilled.

I examined the eye four weeks after the operation, and it appeared to have fully recovered, and vision was, undoubtedly, as good as ever.

These two interesting cases, as well as numerous others in the practice of other surgeons, show the usefulness of the electro-magnet. Both eyes, without doubt, would have been lost, and one patient, at least, would have been blind, had it not been for this instrument.

212 FRANKLIN STREET.

ART OF INFANT FEEDING.

W. I. THAYER, D. D. S., M. D., Brooklyn, N. Y.

The large mortality amongst infants is largely due to improper feeding, especially in summer. How best to feed infants, so as to nutrify *every* tissue that none may lack, has been the subject of much controversy.

Some hold that there is no good substitute for mother's milk, and all are pretty well agreed that human milk for infantile nourishment under proper conditions is quite near the sum of perfection. There is, however, a large majority of mothers who are, from good and sufficient reasons, incapable of properly nourishing their young; and, for reasons noted below, the number of good wet nurses is quite as limited.

It is quite probable that the reader does consider it important that *every* tissue of the infant *should be properly and fully nourished*. But there are a large number of children being fed naturally and artificially that are *not fully nourished*. It is not to be understood by this, that the adipose, epidermoid, cellular, elastic or fibrous tissues are not pretty well provided for, even in quite indifferent feeding, but the interests of the petrous tissues have seldom been considered, and the painful exhibit is patent everywhere, by edentulous persons, and mouths full of badly broken-down and

rapidly decaying teeth. The reason of this is because the teeth have not been furnished with the lime salts in due proportion to their demands. Since it is the calcareous matter that enables the teeth to resist most all of disintegrating influences, and since they have been deprived of this pabulum, we find effect to follow cause here as well as in every other condition.

In the late American Medical Association, held May 9, 1888, it was recommended to feed, artificially, infants on barley and rice water with milk or cream and lime water. One cannot put calcareous matter into teeth by lime—carbonate of lime—water, because there is ten times more of the *phosphate* of lime in tooth composition than of the carbonate. A child can, by no possible means, get any of the inorganic constituents out of either rice or barley water, and but a poverty of supply out of cream. Calcareous matter cannot be gotten out of a mammary gland or out of a bottle if it has not been first put there.

Good fresh cow's milk is a good substitute for human milk, if, and provided, some method will be used to partly predigest the tough casein found therein. Children, as a whole, cannot digest such casein. If the nurse will partly digest the milk before ingestion, then all this difficulty will be overcome. But how many mothers are capable of doing it? If too much time is given, the fluid will be made bitter; if too much heat is applied, the digestive ferment is ruined and no digestion has taken place. By the most reliable analysis of human milk that we are able to find vemois, bacquerel and meigs, from over forty-five different women, we find the casein to be 1.046, while a fair average of cow's milk, it runs up as high as 3.022 per cent. Then thoroughly desiccated casein of cow's milk cannot again be dissolved, and is insoluble in strong caustic soda. Hence, the great necessity of predigesting this form of infant food.

All of these difficulties can be overcome in an artificial food, where the manufacturer will make provision for the *petrous tissues*, furnish a liberal supply of the albuminoids and partly pre-digest the different constituents of the artificial food, it is possible to attain unto an exceedingly valuable food for infants, in which

every tissue can be properly nutrified, and pabulum can be furnished that will *digest as readily* as human milk. To elucidate our subject a little further, we will give the composition of some of the artificial foods now on the market, and leave the reader to judge of the soundness of our argument in providing for *all* of the tissues.

Starch foods are Wells, Richardson & Co.'s, which contain of albuminoids 9.05 per cent.; lime salts, 2.36; phosphoric acid, 0.688; digestion, 8.35. Ridge's food, 8.76, 0.48; phosphoric acid, 0.260, digestion, 7.97. Imperial granum, 10.73, 0.37, 0.167, and digestion, 9.55.

Malt foods: Horlick's food, proteins, 11.30; salts, 2.76; phosphoric, 0.421; digestion, 10.85. Mellin's food, proteins, 8.34; salts, 3.53; phosphoric, 0.583; digestion, 7.38.

Milk foods, which are the best adapted for all tissue building, are, first, Nestle's food: Albuminoids, 11.46; salts, 1.75; phosphoric acid, 0.630; digestibility, 11.09. Anglo-Swiss food: Albuminoids, 12.38 per cent. lime; salts, 1.95; phosphoric acid, 0.800, and digestibility as high as 11.20 per cent. Carnrick's soluble food: Albuminoids, 18.22 per cent. (woman's is 17.08); lime salts, 2.991; phosphoric acid as high as 0.874, and ease of digestion, 16.45 per cent., which is as easy to dispose of as human milk.

What is necessary in an artificial food for infants is, first, *ease of digestion*; second, a *high* percentage of the *albuminoids*; and lastly, but far from being the least, a *liberal supply of the inorganic constituents*, especially material to furnish the *phosphate* of lime for the *petrous tissues*. Even good muscular tissue requires some twenty per cent. of the inorganic constituents for their best composition.

The woman, as soon as she is aware that she is pregnant, should partake liberally of the coarser bread foods at least three times a day. Bread foods that are constructed out of the *meal* product of the grain partaken of, such as oat *meal*, graham bread, brown bread made of Indian *meal* and rye *meal*. *Bolted* wheat flour, cooked into any form of food, should *not* be eaten.

All of our grains in their first immediate environment, their husks, are rich in the various lime salts that are necessary to make strong teeth and bones. There is no other form of food that can be found that will furnish in a full and rightly balanced proportion, and so easy of division and appropriation as can be found in the *whole* of our wheat, oat, rye and corn.

The teeth begin to form as early as the sixth week of conception, and it is *when they are forming*, that they require to be fed with calcareous matter. Teeth once built up, *are built up forever*. After eruption, there is no repairing of dental cavies, except by the dentist. Therefore, it follows, that what calcareous matter passes through the umbilical cord, mammary glands and the bottle, is of the highest importance. Suppose that in the last-named food—Carnrick's—or in human milk, none of the proteius or albuminoids were to be found, where would the majority of the tissues be nourished? The same is true if the petrous tissues should be starved.

The starches cannot well be digested by infants under one year of age. These hydro-carbons are disposed of by the amyolytic ferments found in the saliva, pancreatic and intestinal juices. These ferments such children do not secrete in sufficient quantity to digest the starches.

In the natural process of competent digestion, the amyolytic ferments convert starch into *dextrine*, then into soluble sugar which can be immediately absorbed. The manufacturer of an artificial food for infants must imitate nature and convert his raw starches into dextrine by long baking at a temperature of some 350° Fahrenheit. Then, again, his nitrogenous matter—cow's milk—he must partly pre-digest with prancreatine, and this latter, and even the first, process he can do more evenly and successfully, because he employs professional ability in an experienced chemist.

After the child begins to eat, it should have no food constructed out of the *bolted* wheat or grain used. He should *continue to eat liberally* of such coarse bread foods till the last permanent tooth has been erupted more than a year. In fine, if the suggestions of this paper are followed out, it will insure a good set of permanent teeth, that will be able to resist influences that now so easily melt and break them down.

Miscellany.

At the last meeting of the Ophthalmological and Otological Section of the New York Academy of Medicine, the following motion was made and carried:

"That a committee be appointed, of which the Chairman of the section, Dr. David Webster, be a member, whose duty it shall be to obtain a good photograph of the late Dr. Cornelius R. Agnew, for the purpose of having engravings suitable for framing made from this. The right of issue and sale of such engravings shall be given to some first-class publisher, if practicable; if not, the committee shall offer them to the profession at cost."

In accordance with the above, a committee has been appointed. Members of the profession who desire such an engraving, accompanied by an autograph signature, should send their names and addresses to the secretary of the committee, Dr. Charles H. May, 640 Madison avenue, New York city, at once. When all such names shall have been recorded, those who have requested a copy of the engraving will be notified of the cost of the same, either by the publisher or by the committee having the matter in charge.

MEDICAL APHORISMS.—A correspondent signing himself "Artz," sends to the *Canada Lancet* the following professional aphorisms of Amedee Latour:

- "1. Life is short, patients fastidious, and the brethren deceptive.
2. Practice is a field, of which tact is the manure. 3. Patients are comparable to flannel—neither can be quitted without danger.
4. The physician who absents himself runs the risk as the lover who leaves his mistress; he is pretty sure to find himself supplanted.
5. Would you rid yourself of a tiresome patient, present your bill.
6. The patient who pays his attendant, is but exacting; he who does not, is a despot. 7. The physician who depends on the gratitude of his patient for his fee, is like the traveler who waited on the bank of a river until it finished flowing, so that he might cross to the other side.
8. Modesty, simplicity, truthfulness!—cleansing virtues, everywhere but at the bedside; there simplicity is construed as *hesitation*, modesty as *want of confidence*, truth as *impoliteness*. 9. To keep within the limits of a dignified assurance without falling into the ridiculous vaunt-

ings of the boaster, constitutes the supreme talent of the physician. 10. Remember always to appear to be doing something—above all, when you are doing nothing. 11. With equal, and even inferior, talent, the cleanly and genteely-dressed physician has a great advantage over the untidy one.

PHARMACY IN THE SIXTEENTH CENTURY.—In the sixteenth century, in England, Boleyn (Queen Anne Boleyn's cousin), a prominent apothecary, laid down the following rules for the practice of pharmacy: The apothecary must first serve God, foresee the end, be cleanly, and pity the poor. His place of dwelling and shop must be cleanly to please the senses withal. His garden must be at hand with plenty of herbs, seeds and roots. He must read Dioscorides. He must have his mortars, stills, pots, filters, glasses, boxes clean and sweet. He must have two places in his shop, one most clean for physic, and the base place for chirurgic stuff. He is neither to decrease nor diminish the physician's prescription. He is neither to buy nor sell rotten drugs. He must be able to open well a vein, for to help pleurisy. He is to meddle only in his vocation, and to remember that his office is to be only the physician's cook.

DR. GEORGE M. STERNBERG, commissioned by the United States Government to investigate the methods of inoculation practiced in Brazil and Mexico for protection against yellow fever, reports that, so far, no discoveries of practical interest have been made as to the etiology of the disease. During the coming summer, he hopes to pursue his investigations in Havana, making a diligent search for the yellow-fever microbe.

IS CONSUMPTION CONTAGIOUS?—After the study of nearly 12,000 cases, Dr. Hermann Brehmer, an able German physician, rejects the theory of the contagiousness of pulmonary consumption. He finds the disease to be due to deficient nutrition of the lung, which may result from many causes. He believes that the operation of all the causes may produce such changes that it may be possible, years in advance, to predict with great probability which members of a family will be afflicted with pulmonary consumption, and which will remain healthy.—*Medical Herald*.

If antipyrin be dissolved in spirits of nitre, the resulting solution soon assumes a rich yellow color, and, what is more remarkable, a new compound, possessing highly poisonous qualities, is formed. Both of these drugs being recommended for fever, it is not unnatural for the advocate of polypharmacy to combine the two in the same prescription, trusting thereby to obtain an antipyretic of greater value than either alone. This has been done in one case, and—the patient died.

DR. H. C. YARROW is now publishing, in *Forest and Stream*, an interesting series of articles on "Snake Bite and its Antidote." Dr. Yarrow is Curator of Department of Reptiles, U. S. National Museum, and has abundant facilities for the study of this subject. We would suggest that these articles be collected and published as a monograph, as we have not seen before so exhaustive and scientific an investigation of the subject.

THERE have been, during the past month, in the Sisters of Charity Hospital, two cases of tetanus, following compound comminuted fractures. Both of these cases passed through the Emergency Hospital, a fact giving some color to the theory of the infectious nature of this disease.

DR. O'HANLAN, of the Gouverneur Hospital, reports a case of œdema of the lungs, which was relieved by turning the patient flat on the chest, with the head hanging down. The serum flowed from the mouth and nose, and the breathing was promptly relieved.—*New York Medical Times*.

HONORS TO VON BRÜCKE.—The Emperor of Austria has conferred on Hofrath Professor E. Brücke, Professor of Physiology in the University of Vienna, the Order of the "Ehrenzeichen für Kunst und Wissenschaft." This distinction was created by the Emperor last year, and has hitherto, as far as medical men are concerned, been conferred only on Hyrtl.

THE SUPPRESSION OF QUACK MEDICINES IN GERMANY.—Kultusminister von Gossler recently announced his intention of securing the coöperation of the Imperial Government in suppressing all advertisements of secret remedies throughout the German States.

Selections.

ON LEUCOCYTHÆMIA, CONSIDERED AS SPECIFIC CANCER OF THE BLOOD.

By L. BARD, Hospital Physician and Chief of the Anat. Path. Laboratory of the Faculty of Medicine, Lyons.

Leucocythæmia, which is well to be distinguished from leucocytosis—the latter disappears with its causes, and, for this reason, is of short duration, while the former is always progressive, and always terminates with death—is the cancer of the blood, as epidermoidal epithelioma is the cancer of the skin. It is not the formation of a solid tumor that constitutes the characteristic of cancer, it is the increase of pathologic tissue—in the blood, that of the white corpuscula—its steady, irresistible progress from the beginning of the affection, foreign to the inflammatory process and leading to a specific cachexy, which always terminates in death. Leucocythæmia, it is true, is usually connected with hypertrophy of the spleen and of the lymphatic glands, as well as of the so-called hæmatopoetic organs, liver, marrow of the bones, intestinal follicles, thymus, accessory kidneys, and with the formation of small neoplasms of the structure of the adenoid tissue in hypertrophied organs, but this is only an enormous dilatation of the capillary net-work, crammed with leucocytes. The other lymphoid lesions have for their starting-point vascular eruptions in consequence of stagnations, having led to real apoplexies of the white corpuscles of the blood. The modifications of the blood consist in: (1) Multiplication of the white corpuscles; (2) apparition of globules, *i. e.*, young embryonic forms of leucocytes; (3) considerable diminution of the red corpuscles. All these facts agree with the clinical image of cancer, while the classical hypothesis of the origin of leucocythæmia, excessive formation of white corpuscles of the blood in the hypertrophied organs, is refuted by the following circumstances: (1) Multiplication of the white corpuscles not unfrequently being met with without any hypertrophies being present; (2) multiplication of the white corpuscles mostly preceding hypertrophy in time; (3) the specific epithelium of the spleen, the marrow of bones, the lymphatic glands being different from the white corpuscles of blood histochemically as well as biologically. Moreover, this hypothesis has led various authors to the admission of lymphogenous

diathesis or lymphatic adenitis, for the clinical demonstration of which they have associated three diseases of entirely different nature: leucocythæmia, Trousseau's adenitis or Hodgkin's disease, and mycoses fungoides. Of these three diseases, it is only the Hodgkin disease which may combine different affection, it is to say the true cases pertaining to cancer of the lymphatic glands and to the specific infections varieties of adenitis.

What precedes demonstrates the clinical analogy of leucocythæmia with malignant tumors; the pathologico-anatomical analogy results from the following researches, part of which has been published by Bard in the last three years: (1) Never one tissue is transformed into another one, their specific cells producing only cells of the same nature; (2) *all* normal tissues of the human body may give rise to tumors of a mild or of a malignant character, so that an unlimited number of species of tumors is to be admitted, separable into malignant and mild ones. But, although tumors of all tissues may occasionally assume either a mild or a malignant character, it is demonstrated by facts that tumors of certain tissues will, as a rule, assume the malignant type, while tumors of other tissues, as a rule, are of a mild type (*Virchow*, diagn. and progn. of cancer, D. M. Z. 7188). Malignant tumors alone show the characteristic feature of steady and rapid growth through cellular multiplication, and of their structure being made up from embryonic cells which are still of young age. The forms pertaining to the latter in the different tissues, are not known as yet, and for this reason malignant tumors have been divided into different species, without any regard to their originating organs.

This definition of malignant tumors is eminently applicable to leucocythæmia, which is a cancer of the leucocytes, multiplying steadily and rapidly, and giving rise to embryonic forms, the globules. The fact that there are no tumors forming depends on the peculiarity of the blood tissue to be fluid, and, therefore, to produce fluid tissues only, and not solid tissues. The general symptoms and the cachety following cancer of the blood, is, as in all cancers, the exclusive result of hindrance or suppression of the functions of the tissue affected; the enormous number of new-formed cells acts, in this case, mechanically and through their biological properties. The white blood corpuscle is by no means identical with the lymphatic cell, and, in cancer of the blood, is not to be confounded with cancer of the lymphatic glands, leucocythæmia having no connection with the various classes

of adenites. Leucocytosis, for its part, is to leucocythæmia as in solid tissues hyperplastic inflammation is to cancer.—*Deutsche Medizinal Zeitung*.

NAUPATHIA.

A paper was read before the French Academy of Sciences by M. Ossian-Bonnet, on the etiology and treatment of *naupathia* (seasickness). The author claims that the disease is purely of nervous origin; he is strongly inclined to discard the various mechanical theories that have been offered as explanation for it. He dismisses summarily succussion of the cerebral fluid, shock to the pneumogastric, movements of the viscera, etc. M. Ossian Bonnet regards vertigo as the characteristic symptom of *naupathia*; the nausea is the result only of digestive disturbances. He recalls the well-recognized fact that the motion of a ship often causes only vertigo. He mentions also the fact that some persons are affected only by the lateral motion of the ship, and others by the forward or pitching movement. He recalls to us that vertigo may be produced by the apparent instability of objects, known to be stable, as experience in swinging or on merry-go-rounds.

Assuming that the affection is purely "nervous," and that the nausea is the result of digestive derangement, M. Ossian-Bonnet arranged a rational method of treatment and took a sea trip from Havre to Buenos Ayres to test the correctness of his assumption.

A few of his suggestions are remarkably trite; he advises a saline laxative every morning for several days preceding the embarkment. If an attack of nausea comes on, he advises a glass of water to be drunk after each attack. He suggests that the latter measure ensures *lavage* of the stomach, and renders the vomiting less painful. Every one who has ever been "down" to the sea in a ship can endorse this little remarkable statement.

The writer, having observed the influence that antipyrine possesses in diminishing the excito-motor power of the spinal cord, concluded to try this drug in *naupathia*.

It is said that the remedy did not fail in a single case. It is gratifying to know that seasickness is no longer an inevitable ill for some, and that "sea-legs" may be got through antipyrine.

Among the many causes that have been given for seasickness, this is perhaps the most acceptable, seeing that, in using the word *nervous*, the author has left great room for speculation and pins us down to no

succinct article of belief. Moreover, our therapeutics would be broad, for any agent that acted as a nervine would, *a priori*, be permissible in the treatment. Already a great variety of medicaments have been suggested for seasickness, and each one has been hailed as a possible specific. The bromides, morphine, atropine, and others saw their day, and went down finally to a rational insignificance. When cocaine was isolated and its local anæsthetic effect demonstrated, it was supposed that it possibly contained the balm for this troublesome ailment.

It was tried, and benefit was said to have been derived from it in many instances, but reason has also relegated it to its proper sphere.

The *British Medical Journal* recently contained a communication from Dr. J. J. Seiser, in which a mechanical explanation was suggested for seasickness, and a mechanical remedy was given. This observer had often remarked that there was an impulse to breathe irregularly on the part of any one affected by the motion of a ship. This disturbance of system in respiration would naturally cause temporary carbonic acid poisoning of the brain (presumably in the medulla). The symptoms of vertigo and nausea might be explained on this assumption.

The natural inference was, that if persons on ship-board could be got to breathe rhythmically, these two symptoms might be eliminated, by virtue of the elimination of the carbonic acid poisoning. This observer also took a sea trip, and put his theory to test. Forced rhythmical breathing was found to be very satisfactory as a treatment. This observation was corroborated by two other physicians who were associated with Dr. Seiser in the experiments.

No very long time has elapsed since some one suggested that seasickness was the result of an irritation seated in the semi-circular canals. This hypothesis took so firm a hold on the minds of those that promulgated and favored it, that they went about on ship-board, painting vesicating medicaments on the mastoid region of unfortunates who were already subject to one of the most disagreeable ills that flesh is heir to. Whether this treatment was beneficial or not, it soon fell into disuse, for, probably, there was a question in the minds of the patients as to which was worse, blisters behind the ears, or naupathia. Possibly some had ultimately to endure both.

This theory is apparently rational, but the therapeutics which fit the theory perfectly are difficult to carry out, if not impracticable. Imagine a sea-sick person endeavoring to breathe at the rate of twenty

respirations per minute. Their minds would certainly be employed and their attention directed away from their trouble—we doubt very much whether any one who is affected by seasickness would be able to breathe rythmically when he experiences the sensation as if the whole of creation were dropping away from his feet. Every one is familiar with the relief given by holding the breath in the descent of a swing. The desire to hold the breath in the downward swoop of a ship has often been noticed. If a man were to desist from breathing during an entire sea trip, he would probably not experience naupathia at all. Huxley has remarked that the "tendency of physico-chemical science is clearly towards the reduction of the problems of the world of the infinitely little, as it already has reduced those of the infinitely great world, to questions of mechanics."

The direct causes of all things are, perhaps, reducible to some form of mechanical force. Disease, like evil, is possibly the result of force misdirected, inadequate or excessive, for a given object; or a combination of the first with either of the latter two. This seems to us clearly to be the case in functional diseases.

Naupathia is certainly not an organic disease; it must be a functional one. There should, then, be a mechanical cause for it. All intelligent therapeutics are based upon the recognition of cause. The original cause of naupathia is certainly the movement of the ship. This movement disturbs the system in such a way that a series of symptoms and signs are produced. To prevent the movement, would be the first measure suggested by primitive reason. Such a thing is impracticable. The remaining therapeutic course is to prevent the secondary cause, which calls forth the symptoms of the affection. Whatever be the cause, it comes through the nervous system, and the symptoms are all expressed through it. To diminish the sensitiveness of the nervous system to the cause, is surely a rational measure. If an agent can be found to do this without deleterious or unpleasant after-effects, it should be given a fair trial.

The suggestion of antipyrine, by M. Ossian-Bonnet, is at least something new.

In most cases, one dose of twenty grains was sufficient, but in some it was necessary to repeat the dose or to give only in larger quantities. Let it be given a fair trial.

CASCARA SAGRADA IN RHEUMATISM.

By H. T. GOODWIN, M. D.,

Assistant Surgeon, United States Marine Hospital Service.

The effect of Cascara Sagrada in rheumatism I discovered by accident. About three months ago, I was attacked with severe rheumatic pains in my shoulder, the slightest motion causing intense pain. The third day of the attack I commenced taking as a laxative ten drops of the Cascara, t. i. d. The first morning after taking it the pains were so much less severe that I could move my arm freely. The day following I was entirely free of all discomfort.

Although, as I have intimated, I had not taken the Cascara with any idea of relieving the rheumatism, it occurred to me a few days later that possibly the sudden subsidence of pain might have been due to the drug. There being a few cases of rheumatism in the wards, I determined to try to verify my suspicions. Discontinuing the salicylates, iodides, etc., which these patients were taking, I substituted ext. cascaræ sagradæ fl., 1 c. c., t. i. d. The result astonished me. Within twenty-four hours, there was marked improvement in every case. One case is especially worthy of notice. The patient was a Swedish sailor, who had been admitted three months previously. He suffered intensely, and, although almost everything had been given him from which relief might be expected, his suffering was not allayed. For a day or two after admission, he improved on large doses of salicylate of sodium, but subsequently the pains returned as badly as ever, and the salicylate had no further beneficial effect. Iodide of potassium was given several different times, but, owing to an idiosyncrasy, could be continued only two days at a time, a profuse rash making its appearance over the patient's entire body, the pains remaining as acute as ever. They were not confined to two or three joints, but felt in all, being more severe, however, in the wrists, finger-joints, and ankles, all of which sometimes became oedematous. On the evening of February 5th, I commenced the exhibition of fifteen-drop doses of Cascara Sagrada three times daily. The following morning he was about the same; the second day he was much better; on the seventh he was so far recovered that he asked and obtained permission to walk out. From this on he continued to improve steadily, and on the 17th of February was discharged recovered.

I have since used the Cascara in fully thirty cases, some ten of which were in out-patients, and, with the exception of three or four,

in which there was a syphilitic taint, I have obtained the most satisfactory results. I commenced with 1 c. c., t. i. d., and have, so far, never had to increase it beyond 1.5 c. c., and even to this extent in but two cases. I have seldom had to wait beyond twenty-four hours for beneficial effects. In two cases, I had to stop it temporarily, owing to its opening the bowels too freely. In such cases, I would suggest that one of the preparations of iron be given (separately) at the same time. I usually combine it with syrup or glycerin in equal parts, and instruct the patient to take from thirty to forty drops in water. In one case, in which neither it nor the salicylate of sodium appeared to give much benefit, I combined the two with good effect. It is but seldom the bowels are opened too freely by it, the cases above referred to being the only ones I have so far observed.

Among the out-patients upon whom I have used it, were two intelligent officers of vessels. One was an old river pilot, who had periodically suffered intensely for years. I gave him equal parts of the Cascara and syrup, of which I instructed him to take 2 c. c., t. i. d., and requested him to see me again in three days. He returned a month later, and then only to get the medicine renewed. He reported that he had never before had anything relieve him so quickly. The pains began to abate within twenty-four hours after taking the first dose, and in three days after left him entirely. He had had no return, but for fear of another attack, had come to ask for a bottle to keep with him.

The second case was that of Mr. R., first clerk on a large river steamer. He was suffering so much with pain in the hip-joint and thigh, that he could scarcely get to the office. I put him on large doses of salicylate of sodium, with colchicum and iodide of potassium, and instructed him to return in a day or two. In a week, he sent a friend to say that the pain, instead of lessening, was so severe that he could not get to the office. The salicylate, etc., were stopped, and he was given Cascara syrup, thirty-five drops, t. i. d. This was on Friday afternoon. On Sunday, he came to the hospital and reported that he had commenced taking the second prescription Saturday morning, and that on Sunday he had felt decidedly better. He was ordered to continue the drops, and report on Wednesday. Tuesday he sent word that he should be unable to report, as he was sufficiently recovered to resume his usual place on the steamer.

I am not able to explain the action of the drug in relieving rheumatism ; I leave that to other observers. I write this in the hope of inducing other medical men to use the Cascara, report their experience, and indicate, more particularly, in what class of cases they have found it of most benefit.

Editorial.

IN MEMORIAM.

AUGUSTUS REGINALD DAVIDSON, M. D.,

Ex-President of the Buffalo Medical and Surgical Association.

Died May, 25, 1888, aged 43 years.

The ranks of this Society are again broken by the death of an honored member and beloved associate, who merited, by his unsullied character, acknowledged ability and professional attainments, the highest honor in his gift ; and it is a beautiful illustration of the moral force of a pure life and noble heart that when fatal disease threatened, and vital power weakened, and life was imperiled, the heart of the profession and of the community throbbed in sympathy with the good physician, whose life was thus early sacrificed to the cause of human suffering.

It is fitting that this Society bear its testimony to his varied attainments, which were the fruits of patient labor and self-denial, to his achievements in medical science, and to the possibilities which were inseparable from his genius. We appreciate the character that was so perfect, and the life that was so pure and noble. We recognize the force and consistency of his religious example, which contributed so powerful an influence for good. We recall his friendship, which was so hearty and true, and we commend with gratitude the example of his life, which was guided by firm principle, by steadfast purpose, and by just and honorable motives.

In the prime of manhood, and in the very flush of his professional career, Dr. Davidson sacrificed his life to his zeal for the noble profession to which his superior abilities and scientific

tastes peculiarly fitted him. He had lived long enough and accomplished sufficient to leave an indelible mark upon his profession and to secure a grateful remembrance in the hearts of a wide circle of devoted patients. His achievements in the special department of medical science to which he devoted his energies, have made a valuable and permanent addition to the treasures of medical science, and the world will profit by the recorded results of his indefatigable labors, which constitute a rich legacy of his love to the profession he honored by his associations and exalted by his service.

We rejoice that our brother was with us even for a little season. We mourn the sudden death, which forever removed him from us, with a sorrow which reaches our inmost hearts. But he was not taken unawares. His garments were always those of preparation. Men like him are ever ready to die. His life was beautiful, his influence was gracious, and his rest will be sweet. Having lived and worked worthily, and filled the measure of his day, he goes in triumph

“To where, beyond these voices, there is peace.”

MEDICAL DEPARTMENT OF NIAGARA UNIVERSITY.

By the announcement just published, we learn that the next course of lectures is to begin on the evening of September 19th with an introductory address by Professor H. D. Ingraham, and will close April 9, 1889. Some changes have taken place in the personnel of the faculty, which are worthy of note. In the first place, death has removed from it Professor A. R. Davidson, one of its most valued members, and thus inflicted a loss which is most severe. Professor Wheeler, who has served the school temporarily, but most acceptably, during his stay here as United States Marine Surgeon, is soon to be transferred to another port, and his name disappears from the list of teachers. Professor Daniels and Dr. Edward Clark, who have been loyal and earnest workers in the school since its organization, have felt that their own interests would best be subserved by withdrawing, and have resigned. The vacancies thus caused in the

departments of surgery, anatomy, and medical chemistry have been filled as follows: Dr. Herman Mynter, formerly one of the editors of this JOURNAL, has been appointed Professor of Surgery and Clinical Surgery; Dr. Herbert Mickle, heretofore Lecturer on Pathology, Professor of Descriptive and Surgical Anatomy; and Dr. John A. Miller, of this city, Lecturer on Medical Chemistry and Toxicology.

Each of these appointees has much to recommend him for the respective position to which he has been elected. Dr. Mynter comes to the chair of Surgery in the prime of life and full vigor of health, with a fine education and with a high reputation as a surgeon. He has had a large surgical experience, both in private and hospital practice, and for several years has given lectures on clinical surgery, which have been considered of a high order. He is a man of great energy and zeal, and will, without doubt, prove an instructive and interesting teacher. In entering the school, he also becomes surgeon to the Sisters of Charity Hospital, which he hopes to make most complete and successful in its surgical department, and a center of attraction throughout the city and surrounding country for cases requiring surgical treatment, as well as for students and physicians who desire to witness important surgical work.

Dr. Mickle takes the chair of Anatomy with a thorough preparation and knowledge of his subject. He is a man of excellent education, and has already, in his connection with the school from its beginning, proved himself a most interesting and valuable teacher. His study in the hospitals of London, his work here, both privately and in our hospitals, his experience as a didactic and clinical teacher, especially recommend him to the promotion which he has now received. It is safe to predict that he has a bright future before him; and we shall be glad to see him no less distinguished than his brother, Dr. Wm. Julius Mickle, of London, whose fame as an alienist is world-wide.

Dr. John A. Miller, who has been appointed Lecturer on Medical Chemistry and Toxicology, although less known than Dr. Mynter or Dr. Mickle, is a man of excellent training and ability, and will be heard of in the future. He is a resident of

this city, although he has been absent for several years equipping himself as a professional chemist. During the past three years, he has been studying at the University of Berlin, and soon returns crowned with the honors of the institution. He comes to Buffalo to devote himself wholly to chemical work, and to enter a field which is fertile and comparatively unoccupied. The school is fortunate in adding one of his qualifications to its teaching body, and thus, in a measure at least, compensating for the loss caused by Dr. Davidson's death.

Some other changes have been made in the auxiliary faculty, and here, too, the members are all able and worthy men. On the whole, the additions to the medical faculty are commendable and are sources of congratulation.

*DR. O'BRIEN'S NOMINATION FOR THE POSITION
OF HEALTH OFFICER OF THE PORT OF
NEW YORK*

During the last session of the late Legislature, the Governor nominated our townsman, Dr. E. C. W. O'Brien, to the position of Health Officer of the port of New York. He was strongly endorsed by the whole medical profession in this city, where he is well known. It was a matter of general congratulation, and his especial fitness for the position was well recognized. The doctor enjoys the reputation of a man of good judgment, and skilled physician. Few doubted that the Senate could reject such a man to fill the position, especially since the term of the present incumbent has expired many years since. But the rumor came to Buffalo that such might be the case. Almost without consultation, a delegation of citizens and physicians was formed to visit Albany and urge the claims of Dr. O'Brien. The delegation went, was given a hearing before a committee, but great was the disappointment of the profession and the public when we learned, for a particular reason, the nomination was rejected. This position has never been given to Buffalo, and on this account, as well as the eminent fitness of the nominee for the position, our disappointment was great. It is to be hoped if the

Senate next year have the opportunity, it will do justice to Dr. O'Brien and this city. The matter, however, was not at all local, as seen by this article from the *New York Medical Journal*:

THE NEW NOMINEE FOR THE HEALTH OFFICERSHIP OF THE PORT.

Dr. Edward C. W. O'Brien, of Buffalo, having been nominated by the Governor for the office of Health Officer of the Port of New York, it is, in our opinion, earnestly to be hoped that the Senate will confirm the nomination. In the matter of the political antagonism that has for so long a time defeated the confirmation of a new officer, this *Journal* has no preferences whatever, as, indeed, it has none in any other affair of pure politics; but it has a decided preference for a suitable incumbent of the important office in question, and such a man it believes Dr. O'Brien to be. The *New York Journal* cites the expressions of opinion by a great number of the medical men of Buffalo, of all shades of political connection and representing both the medical colleges of Buffalo, which we find filling nearly two columns of the *Buffalo Evening News*. All this shows—what we knew well enough before—that Dr. O'Brien is highly esteemed by his fellow-practitioners, those who know him best, and that his services in the great small-pox epidemic in Buffalo, fifteen years ago, when he was the Health Physician of that city, are remembered and appreciated. It is our conviction that there ought to be no delay in his confirmation.

Dr. F. P. Foster, the distinguished editor of the *New York Medical Journal*, has been intimately acquainted with Dr. O'Brien for sixteen years; is, therefore, well informed in regard to Dr. O'Brien's eminent fitness for the responsible office for which Governor Hill nominated him.

QUACK ADVERTISEMENTS IN THE RELIGIOUS PRESS.

Ever since the time when King Asa was "sick of feet until his disease was exceedingly great, yet in his disease he sought not to the Lord but to the physicians," the clergy (except when sick) seem to have had a strong feeling against the regular practice of medicine. If any person wishes to boom a new patent disease eradicator, he immediately obtains the recommendations and endorsements of a few dozen country clergymen, who, for a small consideration, would recommend hell-fire itself as the best of blood purifiers.

Some forms of religion are of so unhealthy a type, that they render the mind susceptible to all kinds of humbugging. Vendors of proprietary remedies recognize this fact, and, as a conse-

quence, prefer the religious press as the best medium for the advertisement and sale of their wares. One devout editor publishes an advertisement recommending "Tansy, etc., pills, the ladies' favorite, warranted to remove all irregularities and obstructions," and many others of a similar character are found, which would be suppressed by the editor of any respectable secular journal.

The State Medical Society of Arkansas, recognizing the evils attending the present practices of religious journals, at their last meeting, passed the following resolutions :

Resolved, That the members of the State Medical Society of Arkansas have for years observed with pain and mortification the patronage given to charlatanism, in all its multifarious aspects, by the religious press of our country.

Resolved, further and most specifically, That the appearance in religious papers, ostensibly published for the inculcation of truth and morality, of serious homilies on prayer and praise, side by side with cures for consumption, cancer, Bright's disease, and other incurable ailments, to which an editorial endorsement is often given, as well as secret preparations under the cloak of remedies for disease, but really intended for purposes of feticide and other immoral uses, largely tends to shake the confidence of the profession of medicine in the integrity and purpose of the managers and editors of such journals.

Resolved, further, That it has been the well-known custom of the profession to render services gratuitously to clergymen, which we do not regret, nor do we propose to recall, yet we must assert that the frequent occurrence of endorsements and recommendations of the clergy of peripatetic doctors and advertising charlatans has, in many instances, been the only reward of our gratuitous services.

Resolved, further, That we are aware that the editors of religious newspapers admit the painful situation in which these advertisements place them, and excuse themselves by saying that it is necessary to take these advertisements in order to obtain means to conduct their papers; but, in the language of the orthodox theology, we would say: "Put behind you that damnable doctrine that we must do evil that good may come."

Resolved, further, That, as a society, we declare that the continued perpetration of the above offenses by some of the clergy and religious press brings harm to the bodies of their constituency, and damages materially their influence upon the thinking class of the medical profession.

Resolved, That the secretary be instructed to furnish copies of these resolutions to the religious and medical press of the United States, to the American Medical Association, and to the state medical societies, soliciting their co-operation in bringing about a correction of these grievous and palpable evils.

Very respectfully;

L. P. GIBSON, M. D.,
Secretary.

We call the attention of our readers to the new advertisement of Parke, Davis & Co. in this number of the JOURNAL.

WE have received the following interesting epistle from a Kentucky medical man, who seems to have a severe attack of soreheadedness:

LOUISVILLE, June 17, 1888.

The enclosed clipping* is from the Louisville *Courier-Journal* of two days ago. Its appearance in the secular press caused no wonder, but the wonder was how the good editor of the Buffalo paper, from which it appears to be taken, happened to be taken in by Dr. Windy, and where he, the said Windy, became "conspicuous for scientific work." Now, Mr. Editor, this is news to us. If the said Windy is conspicuous for anything but lack of sense, superabundance of gas and large pretensions, it is not known to the average Kentucky doctor. It is well known that there is a coterie of some six or eight men—men of no professional character at home—who attend medical meetings to blow the bazoo for each other in their hustle for official station, and it is an outrage against the profession and an injury to the medical associations that they so often succeed in the accomplishment of their purpose. Most of these men have not a standing at home that should entitle them to any preferment, and the doctor who wears the *nom de plume* of Windy is conspicuous for lack of merit and professional standing. Your notice was undeserved, and was used as an advertisement in a secular paper. This should be enough to open your eyes as to the real character of the man you gave prominence to. The impudence of the small-fry combination alluded to was most conspicuous at the recent meeting of the American Medical, and caused many of us to blush for our State.

If the American Medical proposes to officer the body and sections with such shysters as referred to, the sooner it ceases to exist, the better not only for the profession, but also for the community.

MEDICINE.

MESSRS. SCHIEFFELIN & Co. have forwarded to us a specimen of the new antipyretic phenacetine (para-acetphenetidine), for which it is claimed that it compares favorably in its effect with any of the modern antipyretics, while it is free from their deleterious influences. It is analogous with antifebrine in its chemical composition, is an inodorless and tasteless powder, hardly soluble in water, a little more soluble in glycerine, but easily soluble in hot alcohol. The dose is from eight to twelve grains. This new remedy furnishes another valuable agent in the treatment of pyrexia. Its special advantages over antipyrine and antifebrine are not definitely defined as yet, and its field of usefulness will be determined by the profession to whom it is commended by high authority.

* The following is from the Buffalo *Medical and Surgical Journal*, one of the oldest and best medical journals in the country: "In electing Dr. Wm. H. Wathen, of Louisville, Ky., to be Chairman of the section on Obstetrics and Diseases of Women, and Dr. N. P. Dandridge, of Cincinnati, O., to be Chairman of the section on Surgery and Anatomy, the American Medical Association has performed graceful acts of recognition of men who have been conspicuous for the scientific work they have accomplished in their respective sections. When a medical society brings such men to the front, it does itself honor."

THE American Rhinological Association held its sixth annual meeting at Cincinnati, Ohio, September 12, 13 and 14, 1888.

Book Reviews.

The Pathology, Diagnosis and Treatment of the Diseases of Women. By GRAILEY HEWITT, M. D., Lond., F. R. C. F. A new American, from the fourth revised and enlarged London, edition, with 236 illustrations. Edited, with notes and additions, by H. Marion Sims, M. D., New York; three volumes. New York: E. B. Treat, 771 Broadway. 1887. Price, \$2.75.

The able work of Dr. Hewitt on Diseases of Women is here reproduced and revised under the editorial direction of Dr. Sims, and supplied in convenient form to the profession in the "Medical Classics," by E. B. Treat, of New York. Dr. Hewitt emphasizes two very important points in his works: first, the constitutional condition of the patient, for which attention to nutrition is especially directed, and, second, the mechanical pathology of some forms of uterine disease. The wood-cut illustrations of uterine displacements are of life-size, which affords a surer guide, both to the practitioner and the student, and furnishes the latest methods of treatment, based on these principles. The American editor has added valuable notes, and brings the work up to the developments which have been made in this important department of medical science. We commend this work, and believe it furnishes a safe and reliable guide for the treatment of female diseases and uterine displacements.

The Physician's Leisure Library. GEO. S. DAVIS, Detroit, Publisher. Price per volume, cloth, 50c.; paper, 25c.

The publisher is to be commended for this enterprise, having for its object the publication of excellent medical works in a cheap and attractive form. We have recently received the following numbers:

NOS. 8 AND 9. **THE INFECTIOUS DISEASES.** By KARL LIEBERMEISTER, Professor of Internal Pathology, etc., Tuebingen, Germany.

This German medical classic has been well translated by Dr. Hurd, and we know of no other better means of acquiring

a knowledge of the present methods of therapeutics in Germany than by carefully reading this work. The reader will observe that Dr. Liebermeister is a thorough believer in the bacterial origin of diseases, and his curative measures are almost entirely composed of antiseptics and antithermics. The cold bath is recommended, a remedial procedure which has never been very popular in this country. Although we do not agree with the author's conclusions in many cases, we cannot but commend the work.

No. 11. **THE DISORDERS OF MENSTRUATION.** By EDWARD W. JENES, M. D., Professor of Gynecology in the Michigan College of Medicine and Surgery.

An eminently practical work for the general practitioner. It is carefully and concisely written, and contains just the information we need in the management of these troublesome disorders. We must offer one slight criticism in regard to the prescription-writing: Many of the names of drugs used are those found in pharmacopœia of 1870, and have since been changed. A new book should be up to date in every respect.

Transactions of the New York State Medical Association for the Year 1887.
Edited by Alfred L. Carroll, M. D. J. H. Vail & Co. New York: 1888.

Never have the transactions of this Association, and we add, of any other New York State society, been published in a more attractive form. The lithographs and colored plates are excellent, while the published papers, without exception, show careful thought and often much original research. This book should find a place in every physician's library.

The Essentials of Medical Chemistry and Urinalysis. By S. E. WOODY, A. M., M. D., Prof. of Chemistry and Public Hygiene, etc., in the Kentucky School of Medicine. Second edition. Louisville: J. P. Morton & Co.

This little book is one of the best compends of chemistry we have yet seen. The author has kept the medical bearings of chemistry constantly in view, and it is not lumbered up with a mass of facts which serve only to confuse the student without instructing him. The book is well printed and excellently illustrated. The medical student will find this work a valuable aid in acquiring the principles of what is usually considered the dullest of the elementary medical sciences.

**EDITOR:****THOS. LOTHROP, M. D.****ASSOCIATE EDITORS:****FLOYD S. CREGO, M. D.****CARLTON C. FREDERICK, M. D.****FRED. R. CAMPBELL, M. D.****FRANK H. POTTER, M. D.****EDWARD B. ANGELL, M. D., Rochester. N. Y.****CONTENTS:**

PAGE.	PAGE.
ORIGINAL COMMUNICATIONS:	Cascara Sagrada in Rheumatism. By H. T. Goodwin, M. D.,
Remarks on Pelvic Inflammations, and the Management of their Residues, By Wm. Warren Potter, M. D.,	539
The Electro-Magnet in Removal of Steel from the Interior of the Eye. By Alvin A. Hubbell, M. D.,	545
Art of Infant Feeding. By W. J. Thayer, D. D. S., M. D.,	554
MISCELLANY:	EDITORIAL:
Medical Aphorisms,	558
Pharmacy in the Sixteenth Century,	559
Is Consumption Contagious,	560
Honors to von Brucke,	560
The Suppression of Quack Medicine in Germany,	560
SELECTIONS:	BOOK REVIEWS:
On Leucocythæmia, considered as Specific Cancer of the Blood. By L. Bard,	561
Naupathia,	563
	The Pathology, Diagnosis and Treatment of the Diseases of Women. By Grailey Hewitt, M. D.,
	575
	The Physician's Leisure Library,
	575
	Transactions of the New York State Medical Association for the Year 1887. Edited by Alfred L. Carroll, M. D.,
	576
	The Essentials of Medical Chemistry and Urinalysis. By S. E. Woody, A. M., M. D.,
	576

Index to Advertisements of a Half Page or Over.

PAGE.	PAGE.
New York Pharmacal Association, Lactopeptine, Cover page,	ii
Hazard, Hazard & Co., So. ble Hypodermic Tablets,	iii
Niagara University, Cover page,	iv
W. H. Schieffelin & Co., New Remedies, Fairchild Bros. & Foster, Pure Digestive Ferments and Kindred Preparations,	iv
Rod & Carrick, Soluble Food,	v
University of the City of New York,	vii
The Language of Medicine,	viii
Johnson & Johnson, Belladonna Plaster with Boracic Acid,	ix
McKesson & Robbins, Manufacturing Chemists, New York,	x
Parke, Davis & Co., Manufacturing Chemists,	xi
Buffalo Maternity Hospital,	xii
The American Oxygen Association,	xiii
Union Pharmaceutical Company, Pruno-Phosphorated Syrup,	xiv
C. N. Crittenton, Hydroleime,	xv
John Wyeth & Bro.'s Tablets,	xvii
Buffalo Medical and Surgical Journal,	xviii
Rio Chemical Co., Celerina, Alctris Cordial, Acid Mannate, etc.,	xviii
Powell & Plimpton, Wholesale Druggists, My Tailor,	xix
Dambach & Co., Agents Wampole's Concentrated Extract of Malt,	xx
Bosche Bros., Fine Carriages,	xxi
Battle & Co., Bromidia,	xxi
Fellows' Hypo Phos Phites,	xxii

LACTOPEPTINE is a skillfully prepared combination of Meat-converting, Fat-converting and Starch-converting Materials, acidified with the small quantity of Acids always present in the healthy stomach. It is a most valuable digestive agent, and **SUPERIOR TO PEPsin ALONE.**—Prof. ATTFIELD, Ph. D., F.R.S., &c. Prof. of Practical Chemistry to Pharmaceutical Society of Great Britain.

The most eminent and successful Practitioners consider LACTOPEPTINE the Standard remedy in the treatment



of all those ailments, in which

LACTOPEPTINE

The most important Remedial Agent ever Presented to the Profession for DYSPEPSIA, VOMITING IN PREGNANCY,

CHOLERA INFANTUM,

CONSTIPATION, and all diseases arising from imperfect nutrition.

LACTOPEPTINE IN CHOLERA INFANTUM

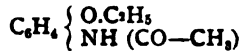
We desire to direct special attention to the great value of LACTOPEPTINE in Cholera Infantum, and other intestinal troubles incident to the heated term.

Send address for our Medical Almanac, containing valuable information.

THE NEW YORK PHARMACAL ASSOCIATION,
BOX 1574. NEW YORK.

THE NEW ANTIPYRETIC PHENACETINE-BAYER

(PARA-ACETPHENETIDINE).



MANUFACTURED BY THE

FARBENFABRIKEN vorm. FRIEDR. BAYER & CO.,
ELBERFELD.

W. H. SCHIEFFELIN & CO.,

170 WILLIAM STREET, NEW YORK,

Sole Licensees and Sole Agents for the United States.

PHENACETINE-BAYER has been already used with marked success in the treatment of Neuralgia, Vomiting, Pneumonia Crouposa, Typhus Abdominalis, Morbilli, Sepsis Puerperalis, Pleuritis, Pyæmia, Typhus Recitativus, Meningitis Cerebrospinalis, Peritonitis, Perityphlitis, Parametritis, Angina.

Dr. KOHLER writes as follows:—

"In healthy persons, Phenacetine does not produce any ill effects in doses of from 0.5–0.7 grm=8–12 grains; but in all cases of pyrexia even relatively small doses of 0.3 grm=5 grains are never without perceptible antipyretic effects. To adults it is best administered in single doses of 0.6–0.7 grm=10–12 grains instead of smaller ones given repeatedly; no disagreeable after-effects, such as nausea, vomiting, or cyanosis were ever observed in 50 cases presenting various febrile conditions. On the contrary, at fever temperatures of 39.5–40.5 C=103.1–104.8 F, a reduction of 1.55–2.5 C=2.7–4.5 F invariably ensued; the reduction is usually gradual, reaching its maximum in 4–6 hours, the rise is likewise gradual, extending over 8–10 hours. Decrease of temperature (Apyrexia) is usually obtained without sweat secretions, but the pulse improves and a pronounced euphoria ensues."

Dr. HORRZ also writes:—

"Phenacetine does not cause any disagreeable symptoms in healthy persons even in doses of 1–2 grm=16–32 grains; (in adults and 8 children) in 20 cases in which it was administered, it proved to be a quickly and energetically acting antipyretic. Nausea, vomiting, cyanosis, collapse or other disagreeable after-effects never occur. I can fully confirm Dr. KOHLER's statements as to the gradual fall and very slow rise of fever temperatures. Both investigators agree that Phenacetine produces Apyrexia as surely as any other antipyretic.

In the 8 cases reported by Dr. HORRZ, Phenacetine acted energetically as an antipyretic on children in doses of 0.3–0.4 grm=3½–7 grains, without causing any disagreeable symptoms, and Dr. SLUTZKY in Barmen has recently given it to young children in doses of 0.50=8 grains; he obtained by its administration not only the desired antipyretic effect, but also a condition of evident comfort and quiet. Besides its antipyretic effects, it possesses eminently antineuralgic properties. Dr. HORRZ published 15 cases of severe cephalalgia and migrain, where Phenacetine produced an effect which was most beneficial and at the same time most astonishing. It should also be mentioned that Phenacetine was of special value in a case which had previously but unsuccessfully been treated by Anisefrin and Antipyrin.

In such large doses as 1–2 grm=16–32 grains given several times a day, Phenacetine is an excellent antineuralgic; it does not act quickly but surely (mostly in 1–2 hours) without causing any ill effects.

Dr. MEUSNER states that:—

"Phenacetine promises to become a most valuable addition to therapeutic agents, owing to its beneficial influence on the nervous system. It is not a narcotic like Morphia, but acts, as Dr. HORRZ also observes, similarly to Antipyrin, but more comforting and pain-allaying. Its wonderful anodyne effect is shown in cases of neuralgia and other derangements of the nervous system arising from reflectant irritation or general nervousness. I have prescribed it almost daily in migrain, gastralgia, ischias, insomnia, etc., caused by diseases of the uterus, the kidneys, or by overwork, etc., and have frequently heard it highly and enthusiastically praised. For insomnia caused by overwork and nervous excitement, I myself have taken doses of 1 grm=16 grains with the best result. Phenacetine, contrary to Quinine, Bromide of Potassium, and the narcotics proper, does not cause lassitude or other disagreeable symptoms and is easily taken on account of its tastelessness. As it promises to become an important remedy in many hysterical, neuralgic, and other nervous disorders, I do not hesitate to predict for it in this respect a distinguished place among therapeutic agents."

The new antipyretic is best administered in pill form—and we are prepared to furnish it in that form in strengths of 3 and 4 grains to each pill.

SALOL in Diarrhœa, Dysentery, and Intestinal Inflammation.

This valuable remedy has met with unique success in cases of a rheumatic nature, but recently attention has been strongly directed to Salol as an antiseptic and cure for intestinal troubles, including typhoid fever.

The indications for Salol in bowel complaints are vomiting, purging, and cramps. Cholera-Infantum seems to be particularly amenable to treatment with this drug.

Several valuable articles have been written, strongly commending Salol in Diarrhœa, and Dysentery—*Vide N. Y. Med. Journal*, August 6, 1887, and April 7, 1888; *North Carolina Med. Journal*, September, 1887.

Our revised "Treatise on Salol," containing very valuable notes, which have been collated from American and Foreign journals, will be mailed on application.

We manufacture pills of Salol in strengths of 2½ and 5 grains to each pill.

W. H. SCHIEFFELIN & CO.,

Nos. 170 and 172 William St., New York.

(Please mention this Journal.)

EXCERPT FROM AN

ORIGINAL LECTURE

ON THE

TREATMENT OF DYSPEPSIA.

By WILLIAM MURRELL, M.D., F.R.C.P.

(Report of Lecture delivered at the Westminster Hospital, London.)

"Pepsin was of great value in the treatment of dyspepsia, if certain points were attended to in prescribing it. It would not do to simply write down 'Pepsin.' Pepsin by itself unqualified had no meaning, and it was essential to indicate distinctly what brand of pepsin was required."

The lecturer stated that "during the last two years he had carefully tested all the pepsins of which he had been able to obtain specimens. The results were simply startling. Of two different kinds of pepsin, equally popular and equally well known, one was found to be five or six times as active as the other.

"The best pepsin was 'Fairchild's.' Bullock's came next, and then Squires'.

"The French and German pepsins were a long way down in the list, and could not be compared for one moment with either the English or the American.

"Of late years, a great deal has been written about carica papaya as a digestive agent; but, as a matter of fact, papaw juice could not compare in activity with the best pepsin.

"The best pepsin examined had about half the activity of the best pepsin, as shown by experiments made both in acid and alkaline solutions.

"The plan of predigesting milk and other articles of food with pancreatic extract answered admirably, and should always be resorted to in intractable cases."

MORAL.—Prescribe Fairchild's Pepsin.

CARNRICK'S SOLUBLE FOOD

Is the only infants' food manufactured that perfectly nourishes the child without the addition of cow's milk. We do not except the so-called milk foods, for they contain but a *very small percentage* of the solid constituents of cow's milk. Most of the credit given to prepared foods belong to cow's milk, which must be added to them, or the child would starve.

Carnrick's Soluble Food is composed of about equal proportions of the solid constituents of cow's milk, partially digested, and wheat flour, the starch of which is converted into dextrine and soluble starch.

Thomas H. Rotch, M. D., Instructor in the Diseases of Children, Medical Department of Harvard University, in the Boston Medical and Surgical Journal, Sept. 29, 1887, says: "Cow's milk is the universal menstruum of infant foods all over the world, and is the actual food which the infant is getting; hence, it is irrational and unfair to speak of, and give the credit to, various artificial foods, when we really should speak of cow's milk, with its modification to a greater or less degree by certain adjuvants under the name of infant foods, which all supply about the same variety of ingredients in common: such small amount of these ingredients as to be of little benefit in nourishing the infant, and would not nourish it unless aided by cow's milk."

CARNRICK'S SOLUBLE FOOD

Is positively the only Infants' Food manufactured, to which the foregoing Criticisms do not apply.

BEEF PEPTONOIDS,

(Concentrated Beef and Milk with Gluten,)

Is the most concentrated and easily-digested nutriment that has ever been introduced to the medical profession. Beef Peptonoids, in the form of a powder, is not a pure peptone, only one-fourth being digested. We are confident that you will find Beef Peptonoids in all cases where you desire a concentrated and easily-digested food, superior to any preparation in the market, or that can be prepared in the household.

The following are the opinions of most eminent authorities in the world:

Prof. Attfeld says of Beef Peptonoids: "It is by far the most nutritious and concentrated food I have ever met with."

Prof. Stutzer says: "When the formation of flesh and blood is to be promoted and vigor infused into a patient, Beef Peptonoids for this purpose stands first and foremost amongst all the preparations I have examined."

LIQUID PEPTONOIDS

Is presented in the form of an elegant cordial, containing twenty per cent. of spirits. Its nutritive constituents are wholly digested. It will agree with patients who reject all other foods.

PEPTONIZED COD LIVER OIL AND MILK

Is superior to other Preparations of Cod Liver Oil:

Because the *division of the oil globules is from twenty to one hundred times finer* than any other preparation of Cod Liver Oil ever produced, and, consequently, brought nearer the condition required for assimilation.

It is predigested, and is, therefore, more easily retained by weak and enfeebled stomachs, and eructations are less liable to follow.

Samples sent on application by

**REED & CARNRICK,
NEW YORK.**



HORSEMEN'S HEADQUARTERS.

Horse Boots, Clipping Machines, Sheets,
Nets, Turf Goods, Condition Powders,
Kendall's Spavin Cure, Saddles,
Bridles, Whips, Bits, Muzzles,
Harness Polish, Oil, Soap,
Brewster Breaking
Harness.

PLEASURE, BUSINESS & TROTTING HARNESSES.

Horse Furnishing Goods of Every Description.

The Largest and Oldest Establishment in the City

J. S. LYTLE & SON,

No. 20 Exchange St., - BUFFALO, N. Y.

Take only and insist on "The Best of American Manufacture."

PLANTEN'S CAPSULES.

Known as Reliable for General Excellence over 50 Years. Established 1836.

H. PLANTEN & SON, 224 William St., New York

HARD AND SOFT CAPSULES, Filled, All Kinds.

(9) SIZES, 2, 5, 10 and 15 Minims; and 1, 2½, 5, 10 and 15 Grammes

New Articles Added: **OIL OF WINTERGREEN, SANDALWOOD (Pure).
SANDALWOOD, 1-10 Camia. OIL OF JUNIPER. APIOL PEARLS.**

IMPROVED EMPTY CAPSULES.

EMPTY, for Powders, 8 sizes. { CAPSULES } VAGINAL, - 6 sizes.
" " Liquids, 3 " { TRIAL BOX, 25 Cents. } RECTAL, - 3 "

Horse Ball, 6 Sizes, and Capsules for Mechanical Purposes.

All kinds of Capsules to order, and of any size required. New articles and Cap-
suling Private Formulas a specialty.

Samples sent free.

Specify PLANTEN'S CAPSULES on all orders. Sold by all Druggists.

The College of Physicians and Surgeons OF CHICAGO.

SEVENTH REGULAR SESSION OPENS SEPT. 25, 1886.

GRADED COURSE OF INSTRUCTION. - UNSURPASSED CLINICAL ADVANTAGES.

FEES.—Matriculation, \$5; General Ticket, admitting to all the lectures and including all practical work in the Laboratories, \$60. For announcements and further information, address

WM. E. QUINN, M. D.,
Corresponding Secretary, 3160 Indiana Ave.

A. REEVES JACKSON, M. D.,
President, 271 Michigan Ave., Chicago, Ill.

UNIVERSITY OF THE CITY OF NEW YORK,

MEDICAL DEPARTMENT.

410 East Twenty-Sixth Street, opp. Bellevue Hospital, New York City.

FORTY-EIGHTH SESSION, 1888-9.

FACULTY OF MEDICINE.

REV. JOHN HALL, D. D., LL. D., Chancellor of the University.

REV. HENRY M. McCracken, D. D., Vice-Chancellor.

CHARLES INSLEE PARDEE, M.D., Dean of the Faculty; Professor of Otolary.

J. W. S. ARNOLD, M.D., Professor Emeritus of Physiology and Histology.

ALFRED L. LOOMIS, M.D., LL.D., Professor of Pathology and Practice of Medicine; Physician to Bellevue Hospital.

WM. H. THOMSON, M.D., LL. D., Professor of Materia Medica and Therapeutics; Diseases of the Nervous System; Physician to Bellevue Hospital.

J. WILLISTON WRIGHT, M.D., Professor of Surgery; Surgeon to Bellevue Hospital.

WM. MECKLENBERG POLK, M.D., Professor of Obstetrics and Diseases of Women and Children; Physician to Bellevue Hospital, and to Emergency Lying-in Hospital.

LEWIS A. STIMSON, M.D., Professor of Anatomy; Professor of Clinical Surgery; Surgeon to Bellevue and Presbyterian Hospitals.

RUDOLPH A. WITTHAUS, M. D., Professor of Chemistry and Physics.

WM. G. THOMPSON, M. D., Professor of Physiology.

STEPHEN SMITH, M.D., Professor of Clinical Surgery; Surgeon to Bellevue Hospital.

A. E. MACDONALD, LL.B., M.D., Professor of Medical Jurisprudence and Psychological Medicine; General Superintendent of New York City Asylum for the Insane.

CHARLES S. BULL, M.D., Lecturer on Ophthalmology; Surgeon to the New York Ophthalmic and Aural Institute.

FANEUIL D. WEISSE, M.D., Professor of Practical and Surgical Anatomy; Surgeon to Workhouse Hospital, B. I.

HENRY G. PIFFARD, M.D., Clinical Professor of Dermatology; Consulting Surgeon to Charity Hospital.

JOSEPH E. WINTERS, M.D., Clinical Professor of Diseases of Children.

PRICE A. MORROW, M. D., Clinical Professor of Venereal Diseases; Surgeon to Charity Hospital.

WM. C. JARVIS, M. D., Clinical Professor of Laryngology.

LAURENCE JOHNSON, M. D., Professor of Medical Botany; Visiting Physician to Randall's Island Hospital.

A. M. PHELPS, M.D., Clinical Professor of Orthopedic Surgery.

HENRY P. LOOMIS, M. D., Adjunct Professor of Pathology and Director of the Pathological Laboratory.

E. D. FISHER, M. D., Adjunct Professor of Medical Jurisprudence and Psychological Medicine.

MAURICE N. MILLER, M. D., Director of the Histological Laboratory.

S. C. BLAISDELL, M. D., T. D. MERRIGAN, M. D., Demonstrators of Anatomy.

THE PRELIMINARY SESSION will begin on Wednesday, September 19, 1888, and end October 3, 1888. It will be conducted on the same plan as the Regular Winter Session.

THE REGULAR WINTER SESSION will begin October 3, 1888, and end about March 18-9. The Plan of Instruction consists of Didactic and Clinical Lectures, Recitations and Laboratory Work in all subjects in which it is practicable.

LABORATORIES AND SECTION TEACHING.—The complete remodeling of the College building, and the addition of the new "Loomis Laboratory" adjoining, is completed. They will afford greatly-increased laboratory accommodations in the departments of Biology, Pathology, Physiology, Chemistry and Physics. A new amphitheatre and a new lecture-room have been provided, as well as adequate facilities for Section teaching, in which the material from the College Dispensary will be utilized.

Two to five Didactic lectures and two or more Clinical lectures will be given each day by members of the Faculty. In addition to the ordinary clinics, *special clinical instruction*, WITHOUT ADDITIONAL EXPENSE, will be given to the candidates for graduation during the latter part of the Regular Session. For this purpose the candidates will be divided into sections of twenty-five members each. All who desire to avail themselves of this valuable privilege must give in their names to the Dean during the first week. At these special clinics students will have excellent opportunities to make and verify diagnoses, and watch the effects of treatment. They will be held in the Wards of the Hospitals and at the Public and College Dispensaries.

Each of the seven professors of the Regular Faculty, or his assistant, will conduct a recitation on his subject one evening each week. Students are thus enabled to make up for lost lectures and prepare themselves properly for their final examinations without additional expense.

THE SPRING SESSION will begin about the middle of March and end the last week in May. The daily Clinics and Special Practical Courses will be the same as in the Winter Session, and there will be Lectures on Special Subjects by Members of the Faculty.

It is supplementary to the Regular Winter Session. Nine months of continued instruction are thus secured to all students of the University who desire a thorough course.

FEES.

For course of Lectures.....	\$140 00
Matriculation.....	5 00
Demonstrator's Fee, including material for dissection.....	10 00
Final Examination Fee.....	20 00

For further particulars and circulars, address the Dean,

Prof. CHAS. INSLEE PARDEE, M. D.,

University Medical College, 410 East 26th St., New York City.

WESTERN PENNSYLVANIA MEDICAL COLLEGE

CITY OF PITTSBURGH.

The REGULAR SESSION begins on the last Tuesday of September, and continues six months. During this session, in addition to four didactic lectures, two or three hours are daily allotted to clinical instruction.

Attendance upon two regular courses of lectures is requisite for graduation. A three years' graded course is also provided.

THE SPRING SESSION embraces recitations, clinical lectures and exercises, and didactic lectures on special subjects. This session begins the second Tuesday in April, and continues ten weeks.

The laboratories are open during the collegiate year for instruction in Chemistry, Microscopy, practical demonstrations in Medical and Surgical Pathology, and lessons in Normal Histology.

Especial importance attaches to the superior clinical advantages possessed by this college. For particulars, see annual announcements and catalogue, for which address the Secretary,

PROF. W. J. ASDALE, 1207 Penn avenue, PITTSBURGH, Pa.

— THE —

Language of Medicine.

A MANUAL GIVING THE ORIGIN, ETYMOLOGY, PRONUNCIATION AND
MEANING OF THE TECHNICAL TERMS FOUND IN
MEDICAL LITERATURE.

By F. R. CAMPBELL, A. M., M. D.,

*Professor of Materia Medica and Therapeutics, Medical Department
of Niagara University.*

8vo, 325 pages. Price, cloth, \$3.00.

"A most valuable book, and no less valuable than charming. Upon studying these pages, we begin to have an idea of the manner in which the names of our various diseases originated. . . . Suffice it to say, that we have here an excellent text-book and history combined, a work which will be appreciated by both old and young. . . ."—*Medical Register*.

" . . . Certainly such a book is sadly needed when we reflect upon the wholesale mispronunciation, not only by medical students, but by old practitioners of medicine. To the medical teacher, student and practitioner, Campbell's 'Language of Medicine' is indispensable."—*Practice*.

"The book is gotten up in excellent style, and is what has been needed for many years."—*Philadelphia Med. Times*.

"The book is, on the whole, a most valuable addition to every physician's library, and will undoubtedly receive a welcome from all who really appreciate its object."—*Gaillard's Med. Journal*.

"We cordially commend this book as a delight to every real student."—*American Lancet*.

New York: D. APPLETON & CO., 1, 8 and 5 Bond Street.

BELLADONNA PLASTER

INCORPORATED

WITH BORACIC ACID,

GIVING AN INCREASED ACTION.

See Dr. Agnew's Report.

IN consequence of a suggestion coming from DR. J. V. SHOEMAKER, of Philadelphia, we have devoted considerable attention to a valuable improvement in Medicated Plasters in rubber combination, by means of the addition of Boracic Acid to regular Pharmacopœia formulas. The result of our experience clearly demonstrates that an increased and more reliable therapeutic effect is obtained thereby, owing to the fact that Boracic Acid not only decomposes the fatty matter in the pores of the skin, but by holding the drug employed in a more soluble condition it is more readily absorbed. Whenever **BELLADONNA PLASTER** is indicated, we find this combination of inestimable value.

Dr. D. H. Agnew, of Philadelphia, Professor of Surgery in the University of Pennsylvania, Surgeon-in-Chief to the late President Garfield, says: "I am greatly pleased with your Belladonna Plaster, with Boracic Acid. I find it gives a quicker and better effect than any Belladonna Plaster I have heretofore used."

Comparative Analyses; Condensed Report.

Prof. B. F. DAVENPORT, Boston, Mass.

Brand	Average Quantity of Atropine in each Plaster.
Johnson & Johnson.....	0.588 grains
Seabury & Johnson.....	0.208 "

J. P. BATTERSHALL, Ph. D.

Johnson & Johnson.....	0.629 grains
Seabury & Johnson.....	0.154 "

Johnson & Johnson, Operative Chemists, 23 Cedar St., N. Y.

VEGETABLE PEPSIN PAPOID,

A New Drug obtained in the Tropics, from the fruit of the Carica Papaya.

SUPERIOR TO ANIMAL PEPSIN.

Prof. Finkler, of University of Bonn, states that:

Papoid converts five times as much albumen into peptone, bulk for bulk, as the best pepsin.

Papoid increases the flow of gastric juice by stimulating the peptic glands.

Papoid acts in the presence of an alkali or an antiseptic, which pepsin will not do.

Useful in all forms of dyspepsia. Used with Bicarbonate of Soda or Boracic Acid, gives excellent results where acid dyspepsia is indicated.

Endorsed by Drs. Herschell, London; Kohts, Ascho, Shaeffer, Rossbach, Heinemann, Germany and many others. Send for Pamphlet.

JOHNSON & JOHNSON, Sole Agents, 23 Cedar St., New York.

Some Valuable Remedies with New Notes.

McK. & R. Ichthyol, 2 grain pills.

SKIN DISEASES, RHEUMATISM, ETC.

McK. & R. Mercury with Chalk, 1-4 and 1 grain pills.

SYPHILIS.

McK. & R. Cannabis Indica Extract, 1-8, 1-4 and 1-2 grain pills.

Assayed and absolutely reliable.

DYSENTERY, DIARRHŒA, ANOREXIA.

McK. & R. Dipsomania Granules.

(Strychninæ Nitras, gr. 1-60). Send for full notes on the value of this remedy.

McK. & R. Arseniate of Strychnine, 1-120, 1-60 grain granule.

(TONIC.)

McK. & R. Chloride of Methyl Spray.

(NEURALGIA, SCIATICA, ETC.)

McKesson & Robbins are agents for the imported French apparatus and can supply it on demand. A monograph containing full directions for the use of spray, translated from the French, sent free on application.

McK. & R. Qualac, 3 grain pill.

(EMMENAGOGUE.)

McK. & R. Hyosoline, Hydrobromide, 1-200, 1-100 grain.

(SEDATIVE.)

This granule will frequently be found of value in some cases of mania.

McK. & R. Hyoscyamine, 1-20, 1-500 grain.

(ANTISPASMODIC.)

McK. & R. Jambul, 5 grain pills.

(DIABETES.)

McKesson & Robbins will mail their monograph giving the indications and dose of this new remedy in diabetes, free, to any physician. Their pills are prepared from selected seed and fully represent the drug.

McK. & R. Mercury, Tannate, 1 grain.

(SYPHILIS.)

Contains fifty per cent. of mercury and may be given for a long time without disturbing the system. Dose, one or two pills three times a day, one hour before meals.

McK. & R. Naphthalin, 3 and 5 grains.

(ANTIFERMENTATIVE.)

This drug is best given by the mouth and in the capsular form. It is recommended in dysentery, tape-worm, ascariæ, etc. Send to McKesson & Robbins for their monograph.

McK. & R. Strophanthus, 1-20, 1-4 grain.

(CARDIAC TONIC.)

These granules are equal respectively to one and five drops of the one in twenty tincture prepared by Dr. Fraser. Write to McKesson & Robbins for their monograph containing notes on the use and value of this new heart tonic.

McK. & R. Sulphate of Sparteine, granules, 1-4 grain.

(CARDIAC TONIC.)

McKesson & Robbins will send full notes on the employment of this remedy to any physician writing for it

McK. & R. Terpin Hydrate, 2 grains.

(BRONCHITIS.)

This drug has been employed with success by the French and German practitioners in diseases of the lungs. McKesson & Robbins will send full notes on its use free on request.

McK. & R. Thymol, 2 1-2 grains.

(ANTISEPTIC.)

Thymol has been found valuable as a tæniacide, and in intestinal diseases, catarrhs, typhoid fever, etc. McKesson & Robbins will mail their monograph entitled "Thymol," containing latest notes, free.

McK. & R. Wood Creasote, pills, 1-2 and 1 grain.

(PHTHISIS.)

Send for our monograph giving full notes on the use, value, dose, etc., of wood creasote in phthisis and laryngeal affections.

The following monographs will be sent free to any physician: "Jambul," "Naphthalin," "Strophanthus," "Terpin Hydrate," "Thymol," "Dipsomania," "Oleates," "Salol," "Cocaine," "Creasote," "Sparteine," "Abortion of Syphilis," "Cannabis Indica," "Ichthyol."

NOTE.—The monographs mentioned above—which are sent free to any physician writing to McKesson & Robbins, N. Y.—are compiled from the latest reliable information, and are in every case accompanied with foot-notes giving the authority.

McKESSON & ROBBINS,

MANUFACTURING CHEMISTS.

NEW YORK.

Plain Talks to Physicians.

IMPROVED DIGESTIVE FERMENTS.

In conformance with our announcement to present in our plain talks to physicians new discoveries, resulting from experimental work at our laboratory, we have pleasure in being able to offer our improved digestive ferments.

Of physiological remedies which have been of late carefully studied, and widely employed by physicians, among the first in importance and utility are the digestive ferments. Inasmuch as gastric digestion is regarded as the most often at fault, pepsin is the digestive ferment most largely used.

That the remedy is an efficient one is attested by thousands of those who have obtained from it the relief and aid they sought, other thousands however condemn it as worthless on the best possible ground; that of their own experience. Why is this?

One cause for this discrepancy in testimony has been stated by physicians who have given special study to this subject to be the too indiscriminate administration of pepsin in all cases of indigestion and the failure to differentiate impaired secretion of the gastric ferment from other causes of indigestion, intestinal or hygienic. To clear away this bar to the successful employment of pepsin is the province of medical teachers.

Perhaps a more important cause of failure with pepsin has been the lack of definite knowledge, both on the part of physicians and manufacturers, of the nature of this ferment and the conditions indispensable to its proper preparation and action. This cause of failure it is the part of the pharmacist to do away with.

Our experimental department has been engaged for a long time in the careful investigation of the digestive ferments and while we can not here present in full the results arrived at we may briefly state the following demonstrated facts.

The pepsins hitherto in the market have been open to the following objections: The soluble scale pepsins contain a large amount of peptone, and on this account are exceedingly hygroscopic. Their absorption of water induces decomposition and they soon lose all digestive power. The insoluble scale pepsins contain a large percentage of mucus which, when once dried is exceedingly insoluble and very liable to decompose (these facts accounting for the insolubility and disagreeable odor characteristic of insoluble scale pepsin). The decomposition of such a delicately organized ferment implies deterioration in peptic value.

The precipitated pepsins containing as they do a large proportion of salt are superior to the foregoing, in that they retain longer their digestive power; owing to the preservative action of the salt, even though they are not readily soluble.

These three classes include all the pepsins heretofore offered, and in our experiments we aimed to exclude mucus which is responsible for insolubility, and peptones which are accountable for the hygroscopic character and hence the deterioration of the scale pepsins. The results we have obtained have more than met our most sanguine expectations and we are now prepared to supply three new preparations of pepsin superior to all standards of excellence previously accepted, viz: *Pepsinum Purum in Lamellis*, *Pepsinum Purum Pulvis* (*Pepsinum in Lamellis* in powdered form) and *Concentrated Glycerole of Pepsin*.

Pepsinum Purum in Lamellis is freely soluble, free from peptones and therefore non-hygroscopic and possesses at least twice the strength or digestive value of any pepsin heretofore offered.

Pepsinum Purum Pulvis is offered as a convenient form of dispensing *Pepsinum Purum in Lamellis*.

The *Glycerole of Pepsin Concentrated*, represents the ferment in a permanent concentrated form and is specially adapted to meet the requirements of dispensers, and for the preparation of wines, elixirs and other liquid preparations of pepsin. It is twice the strength of the official saccharated pepsin and 48 times that of the liquor.

We should mention also our *Pure Pancreatin* a preparation possessing to a high degree all the digestive properties of the pancreatin secretion. It is very useful in the preparation of predigested or peptonized milk.

We shall be pleased to mail to physicians on request, literature presenting the subject of digestives and the results of our investigations, and of the superiority of our digestive ferments ask that preference be given in prescribing.

PARKE, DAVIS &

Manufacturers of Chemists,

NEW YORK: { OFFICE, 60 Maiden Lane.
WAREHOUSE AND SHIPPING DEPOT, 21 Liberty St.
CRUDE DRUG WAREHOUSE, 218 Pearl St.

DETROIT, MICH.

. o — THE — o .

BUFFALO ♦ MATERNITY ♦ HOSPITAL,

334 SEVENTH STREET.

Corner Maryland, - - - BUFFALO, N. Y.

MEDICAL STAFF:

ATTENDING PHYSICIANS.

THOMAS LOTHROP, M. D. | C. C. FREDERICK, M. D.

CONSULTING PHYSICIANS.

JOHN CRONYN, M. D., R. L. BANTA, M. D.,
CHAS. G. STOCKTON, M. D., C. M. DANIELS, M. D.
HENRY D. INGRAHAM, M. D.

CONSULTING SURGEON.

W. S. TREMAINE, M. D., U. S. A.

The Buffalo Maternity Hospital is established for two classes of patients—

FIRST—Pregnant women desiring skilled attendance and careful nursing during parturition.

SECOND—Women suffering from diseases peculiar to their sex.

The ablest obstetricians and gynecologists assist the attending staff in the medical and surgical treatment of patients.

Satisfactory references as to character and responsibility will be required of all patients seeking admission.

Terms for treatment and board, and all other information desired of the Hospital, obtained by applying to

DR. THOMAS LOTHROP,

334 Pearl Street, BUFFALO, N. Y.

Soluble Hypodermic Tablets

These Tablets are readily soluble in ten minims of warm water.
They possess the advantage of accuracy of dose and perfect preservation of the drug.

TABLET TRITURATES.

Made according to Dr. Robert M. Fuller's method.

(SEE MEDICAL RECORD, MARCH 9, 1878, AND MARCH 25, 1882.)

An easy, economical and accurate method of dispensing medicines in a compact and palatable form.

MEN'S PEPTONIZED BEEF TONIC.

Possessing ALL THE ELEMENTS NECESSARY FOR THE SUPPORT OF THE SYSTEM; containing the ENTIRE NUTRITIOUS PROPERTIES of the muscular fibre, blood, bone and brain of a healthy bullock preserved by spirit; thus constituting a perfect nutritive, reconstructive tonic.

It is not a mere stimulant, like the now fashionable extracts of beef, but contains blood-making, force-generating and life-sustaining properties, pre-eminently calculated to rebuild and recruit the tissues and forces, whether lost by over-work, general debility, or the more tedious forms of chronic disease.

The Best Three Tonics of Pharmacopœia:

IRON, PHOSPHORUS & CALISAYA

A combination of the Pyrophosphate of Iron and Calisaya never before attained, in which the nauseous inkiness of the iron and astringency of the Calisaya are overcome, without any injury to their active tonic principles, and blended into a beautiful amber-colored Cordial, delicious to the taste, and acceptable to the most delicate stomach.

PURE COD-LIVER OIL

This Oil is manufactured by us on the sea-shore, with the greatest care, from fresh healthy Livers of the Cod only, without the aid of any chemicals, by the simplest possible process and lowest temperature by which the Oil can be separated from the cells of the Livers. It is nearly devoid of color, odor, and flavor—having a bland, fish-like, and, to most persons, not unpleasant taste. It is so sweet and pure that it can be retained by the stomach when other kinds fail, and patients soon become fond of it.

SURGICAL INSTRUMENT DEPARTMENT.

Under the direction and personal supervision of W. F. Ford, Instrument Maker to St. Luke's, Mt. Sinai, New York State Women's Hospitals, Bellevue, and all the other New York Hospitals.

Manufacturers, Importers, Wholesale and Retail Dealers in

Surgical, Dental, Orthopædic Instruments, Catheters, Trusses, Supporters, Silk Stockings, Ear Trumpets, Splints, Anatomical Preparations, Local Anæsthesia Apparatus, Laryngoscopes, Ophthalmoscopes, Hypodermic Syringes, Axilla Thermometers, etc., etc.

HAZARD, HAZARD & CO.,
DRUGGISTS AND CHEMISTS.
NEW YORK.

Niagara University.

MEDICAL DEPARTMENT,

BUFFALO, N. Y.

SESSION OF 1888-9.

FACULTY OF MEDICINE.

WILLIAM S. TREMAINE, M. D., *Emeritus Professor of Principles and Practice of Surgery and Clinical Surgery.*

JOHN CRONYN, M. D., *Professor of Principles and Practice of Medicine and Clinical Medicine; President of the Faculty.*

THOMAS LOTHROP, M. D., *Professor of Obstetrics.*

ALVIN A. HUBBELL, M. D., *Professor of Diseases of the Eye, Ear and Throat; Secretary of the Faculty.*

HENRY D. INGRAHAM, M. D., *Professor of Diseases of Women and Children.*

GEORGE E. FELL, M. D., *Professor of Physiology and Microscopy.*

SIMEON T. CLARK, M. D., *Professor of Medical Jurisprudence.*

FLOYD S. CREGO, M. D., *Professor of Nervous Diseases and Insanity.*

WILLIAM H. PITT, M. D., *Professor of General Chemistry and Physics.*

FREDERICK R. CAMPBELL, M. D., *Professor of Materia Medica and Therapeutics.*

HERMAN MYNTER, M. D., *Professor of Principles and Practice of Surgery and Clinical Surgery.*

HERBERT MICKLE, M. D., *Professor of Descriptive and Surgical Anatomy.*

CARLTON C. FREDERICK, M. D., *Lecturer on Obstetrics.*

FRANK H. POTTER, M. D., *Lecturer on Laryngology.*

EDWARD CLARK, M. D., *Demonstrator of Anatomy.*

THOMAS W. LOTHROP, M. A., *Demonstrator of Chemistry.*

FRANK A. HARRINGTON, M. D., *Lecturer on Materia Medica.*

ALBERT E. PERSONS, M. D., *Lecturer on Hygiene.*

The Next Regular Course of Lectures will begin Wednesday, September 19, 1888, and close April 9, 1889.

The Course of Study of this school embraces three years of time and three full courses of lectures. It is arranged in grades or classes in such a manner as to advance the student progressively and systematically from one subject to another in a just and natural order, rendering the study of medicine both easy and thorough.

Clinical Instruction is considered of paramount importance by the Faculty, and is made a prominent feature of the school. The various Hospitals, Infirmaries, Dispensaries, Asylums, etc., of Buffalo, afford ample clinical facilities.

Students desiring to pursue the curriculum of this school must show fitness for the study of medicine either by certificate or diploma, or by an entrance examination.

Candidates for Graduation must be twenty-one years of age and of good moral character, and must have studied medicine at least three years, including attendance upon three full courses of lectures, the last of which was in this school.

Fees.—Matriculation, \$5.00; Full Course of Lectures, \$75.00; Perpetual Ticket, \$165.00. Graduation, \$25.00. There are no Demonstrators' or other fees, except for materials used in the laboratories and dissecting room.

For announcement and further particulars, address the Secretary,

ALVIN A. HUBBELL, M. D.,

212 Franklin Street, Buffalo, N. Y.

